

**GOBIERNO DE PUERTO RICO
JUNTA REGLAMENTADORA DE SERVICIO PÚBLICO
NEGOCIADO DE ENERGÍA DE PUERTO RICO**

NEPR

Received:

Mar 25, 2022

11:36 AM

IN RE: TARIFA PERMANENTE DE LA
AUTORIDAD DE ENERGÍA ELÉCTRICA
DE PUERTO RICO

CASO NÚM.: NEPR-MI-2020-0001

ASUNTO: Moción en Cumplimiento de
Orden Dictada Durante Conferencia Técnica
Virtual Celebrada el 21 de Marzo de 2022

**MOCIÓN EN CUMPLIMIENTO DE ORDEN DICTADA DURANTE CONFERENCIA
TÉCNICA VIRTUAL CELEBRADA EL 21 DE MARZO DE 2022**

AL HONORABLE NEGOCIADO DE ENERGÍA:

COMPARECE la Autoridad de Energía Eléctrica de Puerto Rico (la “Autoridad”), a través de su representación legal, y muy respetuosamente expone, alega y solicita:

I. INTRODUCCIÓN

El 15 de marzo de 2022, LUMA Energy, LLC (“LUMA”) presentó ante el Negociado de Energía de la Junta Reglamentadora de Servicio Público de Puerto Rico (el “Negociado de Energía” o Negociado”) un escrito titulado *Motion Submitting Quarterly Reconciliations and FCA, PPCA and FOS Calculated Factors and Request for Confidential Treatment* (la “Moción del 15 de marzo”), incluyendo, entre otras cosas, la propuesta de reconciliación de las cláusulas FCA y PPCA correspondiente a los meses de diciembre de 2021, enero y febrero de 2022 y los factores a ser ajustados para los meses de abril, mayo y junio de 2022.

El 16 de marzo de 2022, el Negociado de Energía emitió una *Resolución y Orden* mediante la cual ordenó a la Autoridad, *inter alia*, comparecer a una Conferencia Técnica a celebrarse de manera virtual el 21 de marzo de 2022 a las 10:30 a.m.

Así las cosas, el 21 de marzo de 2022, la Autoridad compareció a la Conferencia Técnica. A la misma se presentaron oficiales de distintas áreas de la corporación pública, incluyendo el

director ejecutivo Ing. Josué A. Colón, la subdirectora ejecutiva de operaciones Ing. Mary Carmen Zapata, y ejecutivos de las áreas de finanzas, generación y la oficina de combustibles. Los funcionarios ofrecieron testimonio sobre temas relacionados a la Moción del 15 de marzo y, además, respondieron a todas las preguntas que a su haber tuvo el Negociado realizar.

La Conferencia Técnica fue extensa y muy productiva. Los funcionarios de la Autoridad y LUMA ofrecieron testimonio al Negociado de Energía por sobre 6 horas. En la misma el objeto primordial de discusión fue entender y confirmar cuales fueron los factores que afectaron la reconciliación de la Cláusula de Ajuste por Compra de Combustible (FCA, por sus siglas en inglés). Durante la Conferencia Técnica el Negociado de Energía realizó una serie de requerimientos de información y solicitudes de producción de documentos a la Autoridad y ordenó el cumplimiento de estas para el día de hoy, 25 de marzo de 2022, en o antes de las 12:00 p.m. (la “Orden”).

II. CUMPLIMIENTO CON LA ORDEN

Se incluye como el Anejo A de esta moción un listado de las peticiones y ordenes del Negociado de Energía con sus respectivas respuestas y documentos de apoyo.

III. INFORMACIÓN SOBRE ESFUERZOS CONTINUOS DEL HON. GOBERNADOR PEDRO R. PIERLUISI PARA MITIGAR EL IMPACTO DEL AJUSTE DE FCA

El pasado 10 de marzo de 2022, el Honorable Gobernador de Puerto Rico Pedro R. Pierluisi envió una misiva a la Junta de Supervisión y Administración Financiera para Puerto Rico (la “Junta de Supervisión”) solicitándole acceso a el fondo de reserva de emergencia del Gobierno de Puerto Rico para estabilizar y mitigar el aumento en el costo de energía. El 17 de marzo de 2022, la Junta

de Supervisión respondió la carta al Honorable Gobernador informándole que tal autorización no sería concedida.

El día de ayer, 24 de marzo de 2022, el Honorable Gobernador remitió una nueva misiva a la Junta de Supervisión reiterando e insistiendo en su petición y enfatizando el efecto en detrimento que tendría que su petición para tener acceso el fondo de reserva sea denegada. La misiva se incluye como Anejo B. De igual manera, la Autoridad continúa trabajando arduamente con el componente fiscal del Gobierno de Puerto Rico para identificar acciones que se podrían ejecutar para mitigar el impacto del ajuste al FCA para el próximo trimestre.

El esfuerzo del Honorable Gobernador es respaldado por todos los esfuerzos que la Autoridad ya ha encaminado para lograr mitigar el impacto de los variantes y altos costos de los combustibles que tanto afectan a los consumidores de Puerto Rico. Los esfuerzos de la Autoridad no se enfocan solo en mitigar los costos presentes, sino que también anticipar y crear soluciones estables a largo plazo. Entre estos esfuerzos está la gestión continua y comprometida de la Autoridad en el éxito de los llamados *tranches* que el Plan Integrado de Recursos estableciera para ejecutar 6 fases de solicitud de propuestas para adquirir hasta un total de 3,750 MW de producción de energía renovable y 1,500 MW de resguardo de energía. El Tranche 1 fue exitoso y la Autoridad logró procurar hasta 844 MW de energía solar. La Autoridad se encuentra en espera de que el Negociado inicie el Tranche 2 para poder así continuar trabajando para alcanzar las metas de producción de energía limpia y asequible. Mientras tanto, y para garantizar la estabilidad del sistema eléctrico durante la transición que Puerto Rico hace hacia la producción de energía 100% limpia, la Autoridad ha identificado y presentado al Negociado de Energía los beneficios de convertir las unidades 7 a 10 de la Central San Juan para producir energía con gas natural (dual). Este proyecto está listo para iniciarse y solo espera por la aprobación de este Honorable Negociado. Esta

conversión ofrecerá a los puertorriqueños los beneficios de un combustible más limpio y mucho más asequible que el diésel y bunker C. Por lo tanto, los clientes no tendrán que continuar dependiendo de los altos precios del diésel y bunker C mientras la Autoridad concreta la transición de sus fuentes de generación a completamente renovables. Una vez el Negociado apruebe las conversiones, la Autoridad podrá generar con un combustible que afecta mucho menos al ambiente, da estabilidad al sistema eléctrico y es menos costoso.

Por otra parte, la Autoridad presentó al Negociado de Energía 102 proyectos para reparar las unidades generatrices existentes con subvenciones federales. Estos proyectos son primordiales porque, además de estar destinados a hacer reparaciones necesarias, estos procuran mayor eficiencia de la flota generatriz actual. La Autoridad está en espera que el Negociado le cite a una ya muy anticipada conferencia técnica para discutir 15 proyectos de alta envergadura que están aún a la espera de una decisión. Mientras más pronto sea la conferencia técnica, más pronto se pueden confirmar los proyectos para comenzar los trámites paralelos de iniciar las reparaciones y procurar los fondos federales para garantizar así que se reembolsará el costo incurrido.

Añadiendo a todos estos esfuerzos, la Autoridad continúa su labor para recuperar costos por interrupciones en el suministro de combustible durante los pasados meses. Tal gestión puede redundar en un recobro de aproximadamente \$ 30 millones que la Autoridad, tan pronto los reciba, devolverá a los consumidores solicitándole a este Honorable Negociado que ajuste el FCA para *disminuir* el recobro por compra de combustible.

En el proceso actual que se persigue hay muchos elementos a considerarse. Entre estos están los efectos colaterales que causa, no solo el alza, pero también la inestabilidad e incertidumbre en las proyecciones de costos de combustibles. Basado en la experiencia de la Autoridad, entre estos efectos están: la demanda de energía se reduce ya que los clientes optan por consumir menos

energía; los clientes dejan de pagar sus facturas o acogerse a planes de pagos; y los consumidores identifican y adquieren fuentes de generación a menor costo, como por ejemplo paneles fotovoltaicos y sistemas de resguardo. Todo esto tiene un efecto común, menos ingresos para la utilidad y, en consecuencia, incertidumbre en los balances operacionales de la corporación.

Destacamos que los esfuerzos detallados anteriormente son parte de la estrategia de la Autoridad para proveer un servicio de energía eléctrica confiable, eficiente y asequible a todos los puertorriqueños. Estos esfuerzos han aumentado la capacidad confiable de las unidades generatrices a un punto que se han reducido considerablemente los apagones causados por la falta de generación y que ha permitido el realizar reparaciones mayores programadas en dichas unidades. En particular, los esfuerzos de la Autoridad de optimizar el abasto de combustible en los tanques de reserva y el realizar prontamente gestiones de reclamación a los suplidores de combustible han contribuido grandemente a que la situación mundial actual no tenga impactos mayores a los experimentados al presente. La Autoridad continuará realizando los trabajos necesarios y tomando las acciones necesarias para el beneficio del Pueblo de Puerto Rico, siempre en cumplimiento con las leyes y reglamentación aplicable, particularmente con las órdenes del Honorable Negociado.

IV. CONCLUSIÓN

POR TODO LO CUAL, la Autoridad solicita respetuosamente a este Honorable Negociado de Energía que tome conocimiento de lo aquí informado, acepte los archivos adjuntos y de por cumplida la Orden.

RESPETUOSAMENTE SOMETIDO.

En San Juan, Puerto Rico a 25 de marzo de 2022.

f/ Katuska Bolaños Lugo

Katuska Bolaños Lugo

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CERTIFICADO DE NOTIFICACIÓN

Certifico que este escrito ha sido presentado a la Secretaria del Negociado de Energía a través del sistema electrónico de radicación <https://radicacion.energia.pr.gov/> y, además, copia del mismo ha sido notificado a la Oficina Independiente de Protección al Consumidor por conducto de la Lic. Hannia Rivera a hrivera@oipc.pr.gov y a LUMA Energy ServCo, LLC y LUMA Energy, LLC por conducto de la Lic. Margarita Mercado a margarita.mercado@us.dlapiper.com.

En San Juan, Puerto Rico, hoy 25 de marzo de 2022.

f/ Katuska Bolaños Lugo
Katuska Bolaños Lugo

Anejo A



GOBIERNO DE PUERTO RICO

AUTORIDAD DE ENERGÍA ELÉCTRICA

A. Petición: Flujo de caja de la Autoridad por un año incluyendo el punto más bajo, esto debe incluir las cuentas de T&D y la cuenta operacional de la Autoridad.

Respuesta: Se anejan los reportes titulados *13-Week Cash Flow Update* para los periodos que terminan el 18 de diciembre de 2020 al 11 de marzo de 2022. Estos reportes representan 66 semanas de operaciones de la Autoridad con sus respectivos balances. En estos periodos el balance para operar fluctuó entre \$ 660.9 millones (29 de enero de 2021) y \$247 millones (11 de febrero de 2022). El pasado 11 de marzo de 2022 la Autoridad tenía \$ 331.5 millones como balance operacional.





**Puerto Rico
Electric Power
Authority**

Puerto Rico Electric Power Authority

13-Week Cash Flow Update

April 14, 2021

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Puerto Rico
Electric Power
Authority

Table of Contents

- General Overview
- January 15th Budget updated for actuals through 4/9/21
- January 15th Budget
- January 15th Budget With Actuals Through 4/9 vs January 15th Budget Cash Bridge

General Overview

- The January 15th Budget With Actuals Through 4/9 vs January 15th Budget Cash Bridge captures the cumulative variance from 1/8/21 through 4/9/21
- Any timing related variances from actual weeks have not been re-timed into future periods for purposes of this analysis

The projections set forth in this report are based on cash flow projections prepared by PREPA on or before January 15, 2021.

On March 12, 2020, Governor Wanda Vázquez Garced declared a state of emergency for Puerto Rico in response to the worldwide COVID-19 outbreak. On March 15, 2020, the Governor signed Executive Order 2020-023 (the “Executive Order”) to Make Viable the Necessary Government and Private Closures to Fight the Effects of Coronavirus (COVID-19) and Control the Risk of Contagion on Our Island. Among other measures, the Executive Order directed the closure of all businesses in Puerto Rico and imposed a curfew for all residents of Puerto Rico. Since March 15, 2020, subsequent Executive Orders have been issued modifying the curfew hours and extent of restrictions on certain businesses and residents.

On April 8, 2021, Governor Pedro R. Pierluisi issued Executive Order 2021-026. Executive Order 2021-026, in effect from April 9, 2021 to May 9, 2021, amends the curfew hours from 12:00 a.m. to 5:00 a.m., Monday through Sunday, previously, to 10:00 p.m. to 5:00 a.m., Monday through Sunday, currently. In addition, recommendation to limit social gatherings in public and private locations remains in place. Furthermore, the business hours of certain commercial activities and of all restaurants, including “food courts”, has been reduced to be from 5:00 a.m. to 9:00 p.m. The indoor occupancy capacity of restaurants remains unchanged from the previous executive order of 50%.

The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.



The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore the cash flow budget remains subject to potential material change.

January 15th Budget With Actuals Through 4/9

(\$ in millions) Week ending	Actual 12/18	Actual 12/25	Actual 01/01	Actual 01/08	Actual 01/15	Actual 01/22	Actual 01/29	Actual 02/05	Actual 02/12	Actual 02/19	Actual 02/26	Actual 03/05	Actual 03/12	Actual 03/19	Actual 03/26	Actual 04/02	Actual 04/09	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 77.7	\$ 32.6	\$ 39.0	\$ 67.7	\$ 74.9	\$ 44.0	\$ 52.6	\$ 66.0	\$ 57.8	\$ 45.0	\$ 59.7	\$ 57.6	\$ 52.4	\$ 62.5	\$ 36.7	\$ 40.2	\$ 67.3	\$ 716.7
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 77.7	\$ 32.6	\$ 39.0	\$ 67.7	\$ 74.9	\$ 44.0	\$ 52.6	\$ 66.0	\$ 57.8	\$ 45.0	\$ 59.7	\$ 57.6	\$ 52.4	\$ 62.5	\$ 36.7	\$ 40.2	\$ 67.3	\$ 716.7
ENERGY PURCHASES																		
Power purchase - AES	\$ (27.9)	\$ -	\$ -	\$ -	\$ (28.0)	\$ -	\$ -	\$ -	\$ -	\$ (25.2)	\$ -	\$ -	\$ -	\$ (26.2)	\$ -	\$ -	\$ -	\$ (79.3)
Power purchase - EcoElectrica	(4.3)	-	-	-	(13.2)	(3.0)	-	-	-	(13.2)	-	-	-	(15.0)	-	(2.3)	-	(46.7)
Power purchase - Renewable sources	(5.6)	-	-	-	(4.1)	(0.7)	-	-	-	(5.2)	-	-	-	(5.8)	-	-	-	(15.8)
Fuel purchase - Fleet and storage	(0.2)	(0.1)	(0.3)	(1.9)	(0.0)	(0.4)	(0.0)	(0.0)	(2.3)	(0.4)	(0.0)	(0.0)	(1.9)	(0.3)	-	(0.5)	(1.9)	(7.7)
Fuel purchase - Freepoint	(3.7)	(17.3)	(7.2)	(7.0)	(3.6)	(14.0)	(7.7)	(16.4)	(4.2)	(8.6)	(4.4)	(20.0)	(8.8)	(9.4)	(9.4)	(14.0)	(14.5)	(134.9)
Fuel purchase - Puma	(6.1)	(2.2)	(2.8)	(5.4)	(5.5)	(6.4)	(6.3)	(5.4)	(2.1)	(8.7)	(2.0)	-	(4.5)	(7.8)	(0.1)	(2.3)	(2.8)	(53.8)
LNG purchase - Naturgy	-	-	-	(40.4)	-	-	-	-	(39.3)	-	-	-	(37.8)	-	-	-	(42.6)	(119.7)
LNG purchase - NFE	-	-	(13.1)	-	-	-	-	(17.1)	-	-	-	(21.1)	-	-	-	(12.5)	-	(50.7)
Total Energy Purchases	\$ (47.8)	\$ (19.5)	\$ (23.4)	\$ (54.7)	\$ (54.4)	\$ (24.5)	\$ (14.0)	\$ (39.0)	\$ (47.9)	\$ (61.2)	\$ (6.4)	\$ (41.1)	\$ (53.1)	\$ (64.3)	\$ (9.5)	\$ (31.5)	\$ (61.8)	\$ (508.6)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ (0.0)	\$ (8.6)	\$ (0.0)	\$ (8.1)	\$ (0.0)	\$ (8.3)	\$ -	\$ (8.6)	\$ (0.0)	\$ (8.6)	\$ -	\$ (8.6)	\$ (0.1)	\$ (8.6)	\$ (0.0)	\$ (8.3)	\$ (0.0)	\$ (50.9)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Benefits	(4.0)	-	(3.5)	-	-	-	-	(2.9)	-	-	-	-	(2.6)	-	(1.3)	-	-	(6.8)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Benefits	-	(4.5)	(0.2)	(4.9)	-	(4.8)	-	(4.8)	(0.1)	(4.8)	-	(4.8)	-	(4.8)	-	(4.5)	-	(28.6)
Estimated Gross Overtime	-	(1.3)	-	(1.3)	-	(1.2)	-	(1.4)	-	(1.5)	-	(1.4)	-	(1.6)	-	(1.4)	-	(8.5)
Total Employee Disbursements	\$ (4.0)	\$ (14.4)	\$ (3.8)	\$ (14.2)	\$ (0.0)	\$ (14.2)	\$ -	\$ (17.7)	\$ (0.1)	\$ (14.9)	\$ -	\$ (14.7)	\$ (2.7)	\$ (15.0)	\$ (1.3)	\$ (14.2)	\$ (0.0)	\$ (94.9)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ (1.8)	\$ (2.4)	\$ (3.7)	\$ -	\$ (1.9)	\$ (1.5)	\$ (1.8)	\$ (0.5)	\$ (1.4)	\$ (0.6)	\$ (2.3)	\$ (1.7)	\$ (2.4)	\$ (0.2)	\$ (1.1)	\$ (4.4)	\$ (0.7)	\$ (20.6)
Other Accounts Payable	(6.4)	4.0	(17.6)	(12.8)	(1.7)	5.5	(8.7)	(11.9)	(1.9)	11.3	(13.7)	(7.0)	(8.3)	(5.8)	(2.4)	1.1	(9.5)	(53.2)
Front-end Transition Services Fee and Expenses	-	(4.9)	-	-	-	-	(4.9)	(21.9)	(6.6)	-	(4.9)	-	-	(5.2)	(4.9)	-	-	(48.5)
Total Other Operating Disbursements	\$ (8.2)	\$ (3.4)	\$ (21.3)	\$ (12.8)	\$ (3.6)	\$ 4.0	\$ (15.5)	\$ (34.3)	\$ (10.0)	\$ 10.7	\$ (20.9)	\$ (8.8)	\$ (10.7)	\$ (11.3)	\$ (8.4)	\$ (3.3)	\$ (10.2)	\$ (122.2)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (6.9)	\$ (1.7)	\$ (3.6)	\$ (0.0)	\$ -	\$ (6.0)	\$ (2.4)	\$ (1.2)	\$ (2.1)	\$ (3.1)	\$ (5.0)	\$ (1.3)	\$ (2.1)	\$ (3.0)	\$ (4.7)	\$ (0.9)	\$ (0.7)	\$ (32.5)
Legal Services	(0.0)	(3.2)	(0.0)	-	(0.4)	(0.4)	(0.4)	(0.9)	-	(0.0)	(0.0)	(0.4)	(0.1)	-	(0.1)	(0.5)	(1.2)	(4.3)
P3 Authority Transaction Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4.0)	-	-	(4.0)
PREPA Restructuring & Title III	(0.2)	(0.1)	(0.2)	-	-	-	(0.3)	(0.1)	(0.8)	(4.5)	(0.3)	-	-	(0.0)	-	-	-	(6.0)
FOMB Advisor Costs allocated to PREPA	-	-	(1.4)	-	-	-	(0.2)	-	-	-	(1.7)	-	-	-	(2.5)	-	-	(4.5)
Total Professional Services	\$ (7.1)	\$ (5.0)	\$ (5.2)	\$ (0.0)	\$ (0.4)	\$ (6.3)	\$ (3.4)	\$ (2.2)	\$ (3.0)	\$ (7.6)	\$ (7.0)	\$ (1.7)	\$ (2.1)	\$ (3.1)	\$ (11.2)	\$ (1.4)	\$ (1.8)	\$ (51.2)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ (0.0)	\$ (0.3)	\$ (0.0)	\$ -	\$ -	\$ (0.1)	\$ (0.3)	\$ (0.8)	\$ (0.5)	\$ (1.5)	\$ (0.3)	\$ (2.6)	\$ (0.0)	\$ (1.0)	\$ (0.0)	\$ (1.7)	\$ (0.5)	\$ (9.5)
FEMA Proceeds	-	-	187.9	-	-	-	0.0	-	7.4	-	-	-	0.7	-	50.1	-	-	58.2
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	50.0	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	-	-	2.5
Total Restoration, Reconstruction & Insurance	\$ 50.0	\$ (0.3)	\$ 187.9	\$ -	\$ -	\$ (0.1)	\$ 2.2	\$ (0.8)	\$ 7.0	\$ (1.5)	\$ (0.3)	\$ (2.6)	\$ 0.6	\$ (1.0)	\$ 50.0	\$ (1.7)	\$ (0.5)	\$ 51.3
NET CASH FLOW	\$ 60.6	\$ (9.9)	\$ 173.3	\$ (14.1)	\$ 16.4	\$ 2.8	\$ 22.0	\$ (28.0)	\$ 3.8	\$ (29.5)	\$ 25.1	\$ (11.3)	\$ (15.6)	\$ (32.1)	\$ 56.3	\$ (11.9)	\$ (7.1)	\$ (9.0)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 409.8	\$ 470.4	\$ 460.5	\$ 633.8	\$ 619.7	\$ 636.1	\$ 638.9	\$ 660.9	\$ 632.9	\$ 636.7	\$ 607.2	\$ 632.3	\$ 621.1	\$ 605.5	\$ 573.4	\$ 629.7	\$ 617.8	\$ 619.7
Net Cash Flow	60.6	(9.9)	173.3	(14.1)	16.4	2.8	22.0	(28.0)	3.8	(29.5)	25.1	(11.3)	(15.6)	(32.1)	56.3	(11.9)	(7.1)	(9.0)
Ending Balance	\$ 470.4	\$ 460.5	\$ 633.8	\$ 619.7	\$ 636.1	\$ 638.9	\$ 660.9	\$ 632.9	\$ 636.7	\$ 607.2	\$ 632.3	\$ 621.1	\$ 605.5	\$ 573.4	\$ 629.7	\$ 617.8	\$ 610.6	\$ 610.6
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ -	\$ 187.9	\$ -	\$ -	\$ -	\$ 0.0	\$ -	\$ 7.4	\$ -	\$ -	\$ -	\$ 0.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Insurance Account	35.2	35.2	35.2	35.2	35.2	35.2	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
Other Restricted & Construction Accounts	55.9	55.9	55.9	55.7	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.1	56.1	56.1	56.1
Total Other Bank Accounts	\$ 91.1	\$ 279.0	\$ 91.1	\$ 90.9	\$ 91.2	\$ 91.2	\$ 88.7	\$ 96.2	\$ 88.7	\$ 88.7	\$ 88.7	\$ 89.4	\$ 88.8	\$ 88.8	\$ 88.8	\$ 88.8	\$ 88.8	\$ 88.8



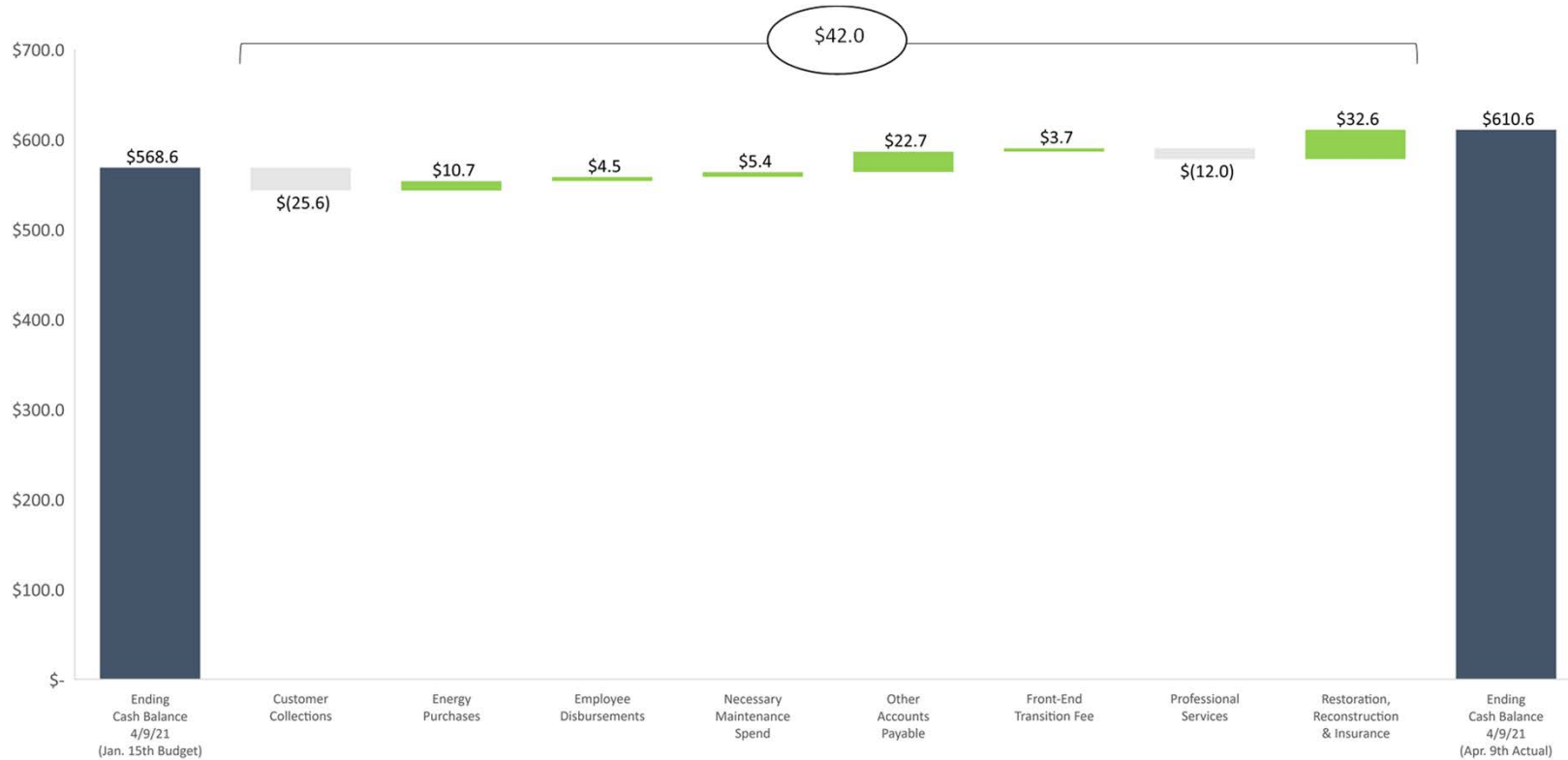
The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore the cash flow budget remains subject to potential material change.

January 15th Budget

(\$ in millions) Week ending	Actual 12/18	Actual 12/25	Actual 01/01	Actual 01/08	1 01/15	2 01/22	3 01/29	4 02/05	5 02/12	6 02/19	7 02/26	8 03/05	9 03/12	10 03/19	11 03/26	12 04/02	13 04/09	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 77.7	\$ 32.6	\$ 39.0	\$ 67.7	\$ 74.5	\$ 53.8	\$ 53.8	\$ 55.7	\$ 55.7	\$ 68.2	\$ 65.7	\$ 48.0	\$ 48.0	\$ 60.4	\$ 48.0	\$ 59.2	\$ 51.2	\$ 742.3
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 77.7	\$ 32.6	\$ 39.0	\$ 67.7	\$ 74.5	\$ 53.8	\$ 53.8	\$ 55.7	\$ 55.7	\$ 68.2	\$ 65.7	\$ 48.0	\$ 48.0	\$ 60.4	\$ 48.0	\$ 59.2	\$ 51.2	\$ 742.3
ENERGY PURCHASES																		
Power purchase - AES	\$ (27.9)	\$ -	\$ -	\$ -	\$ (28.0)	\$ -	\$ -	\$ -	\$ -	\$ (25.1)	\$ -	\$ -	\$ -	\$ (26.3)	\$ -	\$ -	\$ -	\$ (79.4)
Power purchase - EcoElectrica	(4.3)	-	-	-	(13.2)	-	-	-	-	(13.2)	-	-	-	(12.4)	-	-	-	(38.8)
Power purchase - Renewable sources	(5.6)	-	-	-	(4.1)	(0.7)	-	-	-	(5.2)	-	-	-	(6.9)	-	-	-	(16.9)
Fuel purchase - Fleet and storage	(0.2)	(0.1)	(0.3)	(1.9)	(0.0)	-	(0.1)	-	-	(2.0)	-	-	-	(2.0)	-	-	-	(4.1)
Fuel purchase - Freeport	(3.7)	(17.3)	(7.2)	(7.0)	(3.6)	(14.0)	(7.7)	(16.4)	(4.2)	(8.6)	(4.4)	(24.5)	(13.6)	(9.6)	(9.6)	(9.6)	(9.7)	(135.5)
Fuel purchase - Puma	(6.1)	(2.2)	(2.8)	(5.4)	(7.5)	(6.4)	(6.2)	(3.6)	(4.0)	(6.6)	(2.0)	(4.4)	(3.2)	(4.7)	(9.2)	(2.3)	(2.5)	(62.7)
LNG purchase - Naturgy	-	-	-	(40.4)	-	-	-	-	(39.3)	-	-	-	(35.3)	-	-	-	(55.0)	(129.6)
LNG purchase - NFE	-	-	(13.1)	-	-	-	-	(17.1)	-	-	(9.1)	(17.6)	-	-	-	(8.6)	-	(52.3)
Total Energy Purchases	\$ (47.8)	\$ (19.5)	\$ (23.4)	\$ (54.7)	\$ (56.4)	\$ (21.1)	\$ (14.0)	\$ (37.1)	\$ (47.5)	\$ (60.6)	\$ (15.5)	\$ (46.5)	\$ (52.2)	\$ (61.9)	\$ (18.8)	\$ (20.4)	\$ (67.2)	\$ (519.3)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ (0.0)	\$ (8.6)	\$ (0.0)	\$ (8.1)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (51.1)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Benefits	(4.0)	-	(3.5)	-	-	-	(3.4)	-	-	-	-	(4.2)	-	-	-	-	(4.2)	(11.8)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Benefits	-	(4.5)	(0.2)	(4.9)	-	(4.7)	-	(4.7)	-	(4.7)	-	(4.7)	-	(4.7)	-	(4.7)	-	(28.2)
Estimated Gross Overtime	-	(1.3)	-	(1.3)	-	(1.4)	-	(1.4)	-	(1.4)	-	(1.4)	-	(1.4)	-	(1.4)	-	(8.4)
Total Employee Disbursements	\$ (4.0)	\$ (14.4)	\$ (3.8)	\$ (14.2)	\$ -	\$ (14.6)	\$ (3.4)	\$ (14.6)	\$ -	\$ (14.6)	\$ -	\$ (18.8)	\$ -	\$ (14.6)	\$ -	\$ (14.6)	\$ (4.2)	\$ (99.5)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ (1.8)	\$ (2.4)	\$ (3.7)	\$ -	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (26.0)
Other Accounts Payable	(6.6)	3.8	(17.7)	(12.8)	(5.8)	(5.8)	(5.8)	(5.8)	(5.8)	(5.8)	(6.0)	(5.8)	(5.8)	(6.4)	(5.8)	(6.0)	(5.8)	(75.9)
Front-end Transition Services Fee and Expenses	-	(4.9)	-	-	-	-	(26.9)	-	-	-	(12.0)	-	-	-	(13.3)	-	-	(52.2)
Total Other Operating Disbursements	\$ (8.4)	\$ (3.6)	\$ (21.3)	\$ (12.8)	\$ (7.8)	\$ (7.8)	\$ (34.6)	\$ (7.8)	\$ (7.8)	\$ (7.8)	\$ (20.0)	\$ (7.8)	\$ (7.8)	\$ (8.4)	\$ (21.1)	\$ (8.0)	\$ (7.8)	\$ (154.1)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (6.7)	\$ (1.5)	\$ (3.5)	\$ (0.0)	\$ (0.1)	\$ (2.7)	\$ (0.5)	\$ (2.1)	\$ (2.1)	\$ (2.1)	\$ (2.1)	\$ (2.1)	\$ (2.1)	\$ (2.1)	\$ (2.1)	\$ (1.8)	\$ (1.8)	\$ (23.4)
Legal Services	(0.0)	(3.2)	(0.0)	-	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(4.8)
P3 Authority Transaction Costs	-	-	-	-	-	-	(0.8)	-	-	-	(0.8)	-	-	-	-	(0.8)	-	(2.4)
PREPA Restructuring & Title III	(0.2)	(0.1)	(0.2)	-	-	-	(0.3)	-	(1.4)	-	(0.6)	-	-	(0.2)	(0.5)	(0.4)	(0.0)	(3.3)
FOMB Advisor Costs allocated to PREPA	-	-	(1.4)	-	-	-	(0.2)	-	-	-	-	(2.5)	-	-	-	(2.5)	-	(5.2)
Total Professional Services	\$ (6.9)	\$ (4.7)	\$ (5.2)	\$ (0.0)	\$ (0.5)	\$ (3.1)	\$ (2.1)	\$ (2.5)	\$ (3.8)	\$ (2.5)	\$ (3.8)	\$ (4.9)	\$ (2.4)	\$ (2.7)	\$ (2.9)	\$ (5.8)	\$ (2.2)	\$ (39.2)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ (0.0)	\$ (0.3)	\$ (0.0)	\$ -	\$ -	\$ -	\$ -	\$ (0.0)	\$ -	\$ (0.0)	\$ -	\$ (10.9)	\$ (0.3)	\$ (2.6)	\$ (7.0)	\$ -	\$ -	\$ (20.8)
FEMA Proceeds	-	-	187.9	-	-	-	0.0	0.0	-	2.5	7.1	11.1	3.0	7.8	7.0	1.1	-	39.5
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Restoration, Reconstruction & Insurance	\$ 50.0	\$ (0.3)	\$ 187.9	\$ -	\$ -	\$ -	\$ 0.0	\$ -	\$ -	\$ 2.4	\$ 7.1	\$ 0.2	\$ 2.7	\$ 5.1	\$ -	\$ 1.1	\$ -	\$ 18.7
NET CASH FLOW	\$ 60.6	\$ (9.9)	\$ 173.3	\$ (14.1)	\$ 9.8	\$ 7.3	\$ (0.2)	\$ (6.2)	\$ (3.3)	\$ (14.9)	\$ 33.5	\$ (29.8)	\$ (11.8)	\$ (22.0)	\$ 5.2	\$ 11.6	\$ (30.2)	\$ (51.1)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 409.8	\$ 470.4	\$ 460.5	\$ 633.8	\$ 619.7	\$ 629.5	\$ 636.7	\$ 636.6	\$ 630.3	\$ 627.0	\$ 612.2	\$ 645.6	\$ 615.8	\$ 604.1	\$ 582.1	\$ 587.3	\$ 598.8	\$ 619.7
Net Cash Flow	60.6	(9.9)	173.3	(14.1)	9.8	7.3	(0.2)	(6.2)	(3.3)	(14.9)	33.5	(29.8)	(11.8)	(22.0)	5.2	11.6	(30.2)	(51.1)
Ending Balance	\$ 470.4	\$ 460.5	\$ 633.8	\$ 619.7	\$ 629.5	\$ 636.7	\$ 636.6	\$ 630.3	\$ 627.0	\$ 612.2	\$ 645.6	\$ 615.8	\$ 604.1	\$ 582.1	\$ 587.3	\$ 598.8	\$ 568.6	\$ 568.6
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ -	\$ 187.9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Insurance Account	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	45.2	45.2
Other Restricted & Construction Accounts	55.9	55.9	55.9	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
Total Other Bank Accounts	\$ 91.1	\$ 279.0	\$ 91.1	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 90.9	\$ 100.9	\$ 100.9



January 15th Budget With Actuals Through 4/9 vs January 15th Budget Cash Bridge as of April 9, 2021



- “Customer Collections” variance primarily due to timing of collections related to General Client and certain large Government related receivables
- “Energy Purchases” variance primarily due timing of payments and fuel mix partially offset by a \$3.0 million payment to EcoElectrica related to contractually obligated back-up fuel purchases and a \$2.3 million settlement payment regarding IVU taxes previously paid by EcoElectrica
- “Other Accounts Payable” variance primarily due to the timing of check receipts and disbursements clearing our operating accounts and re-classification of payments to certain vendor from Other Accounts Payable to non-Title III professional services
- “Professional Services” variance primarily due to timing of non-Title III payments, catch-up payments related to certain Title III and P3 invoices and re-classification of payments to certain vendor from Other Accounts Payable to non-Title III professional services
- “Restoration, Reconstruction & Insurance” variance primarily due to timing of FEMA reimbursements, including approximately \$50 million received on 3/24 related earthquake peaking units originally forecasted for the week of 4/16, partially offset by permanent work Street Lighting payments



**Puerto Rico
Electric Power
Authority**

Puerto Rico Electric Power Authority

13-Week Cash Flow Update

July 14, 2021

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Puerto Rico
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Table of Contents

- General Overview
- April 16th Budget updated for actuals through 7/9/21
- April 16th Budget
- April 16th Budget With Actuals Through 7/9 vs April 16th Budget Cash Bridge

General Overview

- The April 16th Budget With Actuals Through 7/9 vs April 16th Budget Cash Bridge captures the cumulative variance from 4/9/21 through 7/9/21
- Any timing related variances from actual weeks have not been re-timed into future periods for purposes of this analysis

The projections set forth in this report are based on cash flow projections prepared by PREPA.

On July 1, 2021, Governor Pedro R. Pierluisi issued Executive Order 2021-054. Effective July 5, 2021, Executive Order 2021-054 repeals Executive Order 2021-043 and delegates upon the Secretary of the Department of Health the power to implement measures to manage the emergency caused by COVID-19. As declared in Executive Order 2020-020, Puerto Rico remains under a state of emergency in response to the worldwide COVID-19 outbreak. The state of emergency will remain in effect until such time that the Secretary of the Department of Health concludes that the pandemic is controlled or extinguished.

The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.

The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change. Additionally, the projections are based on PREPA's existing operations and have not yet been updated to take into account T&D service commencement.

April 16th Budget With Actuals Through 7/9

(\$ in millions) Week ending	Actual 03/19	Actual 03/26	Actual 04/02	Actual 04/09	Actual 04/16	Actual 04/23	Actual 04/30	Actual 05/07	Actual 05/14	Actual 05/21	Actual 05/28	Actual 06/04	Actual 06/11	Actual 06/18	Actual 06/25	Actual 07/02	Actual 07/09	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 62.5	\$ 36.7	\$ 40.2	\$ 67.3	\$ 61.0	\$ 61.2	\$ 53.2	\$ 60.9	\$ 66.3	\$ 44.4	\$ 55.8	\$ 39.1	\$ 58.0	\$ 66.9	\$ 61.7	\$ 73.3	\$ 47.9	\$ 749.6
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 62.5	\$ 36.7	\$ 40.2	\$ 67.3	\$ 61.0	\$ 61.2	\$ 53.2	\$ 60.9	\$ 66.3	\$ 44.4	\$ 55.8	\$ 39.1	\$ 58.0	\$ 66.9	\$ 61.7	\$ 73.3	\$ 47.9	\$ 749.6
ENERGY PURCHASES																		
Power purchase - AES	\$ (26.2)	\$ -	\$ -	\$ -	\$ (25.1)	\$ -	\$ -	\$ -	\$ -	\$ (25.8)	\$ -	\$ -	\$ -	\$ (26.7)	\$ -	\$ -	\$ -	\$ (77.7)
Power purchase - EcoElectrica	(15.0)	-	(2.3)	-	(15.1)	-	(0.2)	-	-	(15.0)	-	-	-	(15.1)	-	-	-	(45.3)
Power purchase - Renewable sources	(5.8)	-	-	-	-	(6.7)	-	-	-	-	(1.2)	-	(2.6)	(3.6)	(5.2)	-	(1.0)	(20.4)
Fuel purchase - Fleet and storage	(0.3)	-	(0.5)	(1.9)	(0.0)	(0.4)	(0.1)	(0.0)	(0.4)	(0.1)	-	-	(2.1)	(0.0)	(0.0)	(1.9)	(0.0)	(5.1)
Fuel purchase - Freepoint	(9.4)	(9.4)	(14.0)	(14.5)	-	(5.2)	(10.4)	(10.7)	(5.5)	(16.6)	-	(10.4)	(11.1)	(10.2)	(11.3)	(11.6)	(13.1)	(116.3)
Fuel purchase - Puma	(7.8)	(0.1)	(2.3)	(2.8)	(3.5)	(5.3)	(6.3)	(9.3)	(9.5)	(3.0)	(13.0)	(2.5)	(4.3)	(6.1)	(9.1)	(0.3)	(6.9)	(79.0)
LNG purchase - Naturgy	-	-	-	(42.6)	-	-	-	-	(49.6)	-	-	-	(38.9)	-	-	-	-	(88.5)
LNG purchase - NFE	-	-	(12.5)	-	-	-	-	(12.1)	-	-	-	(11.3)	-	-	-	(13.9)	-	(37.3)
Total Energy Purchases	\$ (64.3)	\$ (9.5)	\$ (31.5)	\$ (61.8)	\$ (43.7)	\$ (17.6)	\$ (17.0)	\$ (32.1)	\$ (65.1)	\$ (60.5)	\$ (14.2)	\$ (24.2)	\$ (59.1)	\$ (61.8)	\$ (25.6)	\$ (27.6)	\$ (21.0)	\$ (469.6)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ (8.6)	\$ (0.0)	\$ (8.3)	\$ (0.0)	\$ (8.3)	\$ (0.0)	\$ (8.1)	\$ (0.0)	\$ (8.4)	\$ (0.0)	\$ (7.9)	\$ -	\$ (5.8)	\$ (0.0)	\$ (29.9)	\$ (0.1)	\$ (2.0)	\$ (70.6)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Benefits	-	(1.3)	-	-	(3.1)	-	-	-	-	(3.7)	-	-	-	-	-	-	-	(6.8)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Benefits	(4.8)	-	(4.5)	-	(4.7)	-	(4.6)	-	(4.7)	-	(4.5)	-	(3.6)	-	(3.4)	-	(1.1)	(26.6)
Estimated Gross Overtime	(1.6)	-	(1.4)	-	(1.3)	-	(1.4)	-	(1.3)	-	(1.0)	-	(0.6)	-	(0.4)	-	(0.4)	(6.4)
Total Employee Disbursements	\$ (15.0)	\$ (1.3)	\$ (14.2)	\$ (0.0)	\$ (17.4)	\$ (0.0)	\$ (14.1)	\$ (0.0)	\$ (14.4)	\$ (3.8)	\$ (13.4)	\$ -	\$ (10.0)	\$ (0.0)	\$ (33.7)	\$ (0.1)	\$ (3.4)	\$ (110.4)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ (0.2)	\$ (1.1)	\$ (4.4)	\$ (0.7)	\$ (0.3)	\$ (0.7)	\$ (1.9)	\$ (0.4)	\$ (0.2)	\$ (0.5)	\$ (0.0)	\$ -	\$ -	\$ -	\$ (3.3)	\$ (1.5)	\$ (0.0)	\$ (8.9)
Other Accounts Payable	(5.8)	(2.4)	1.1	(9.5)	(9.5)	(4.0)	1.3	(9.3)	(4.6)	(5.1)	(3.8)	13.3	(3.3)	(11.2)	(5.1)	(11.0)	(14.9)	(67.2)
Front-end Transition Services Fee and Expenses	(5.2)	(4.9)	-	-	-	(7.6)	-	-	-	(14.1)	(1.1)	-	-	-	(13.3)	-	-	(36.1)
Total Other Operating Disbursements	\$ (11.3)	\$ (8.4)	\$ (3.3)	\$ (10.2)	\$ (9.8)	\$ (12.3)	\$ (0.6)	\$ (9.7)	\$ (4.7)	\$ (19.8)	\$ (4.9)	\$ 13.3	\$ (3.3)	\$ (11.2)	\$ (21.6)	\$ (12.6)	\$ (14.9)	\$ (112.1)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (3.0)	\$ (4.7)	\$ (0.9)	\$ (0.7)	\$ (0.1)	\$ (3.9)	\$ (4.1)	\$ (1.5)	\$ (0.3)	\$ (1.0)	\$ (2.0)	\$ -	\$ (0.1)	\$ (0.1)	\$ (13.5)	\$ (5.9)	\$ (2.1)	\$ (34.5)
Legal Services	-	(0.1)	(0.5)	(1.2)	-	(0.1)	-	(0.4)	-	(0.1)	-	-	(0.5)	-	(0.1)	(0.0)	(0.7)	(1.9)
P3 Authority Transaction Costs	-	(4.0)	-	-	-	-	-	-	-	-	-	-	-	-	-	(0.8)	-	(0.8)
PREPA Restructuring & Title III	(0.0)	-	-	-	(0.3)	-	(0.5)	-	-	(0.0)	-	-	(0.9)	-	-	-	(0.1)	(2.0)
FOMB Advisor Costs allocated to PREPA	-	(2.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Professional Services	\$ (3.1)	\$ (11.2)	\$ (1.4)	\$ (1.8)	\$ (0.4)	\$ (4.0)	\$ (4.6)	\$ (2.0)	\$ (0.3)	\$ (1.1)	\$ (2.0)	\$ -	\$ (1.5)	\$ (0.1)	\$ (13.6)	\$ (6.7)	\$ (2.9)	\$ (39.2)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ (1.0)	\$ (0.0)	\$ (1.7)	\$ (0.5)	\$ (0.6)	\$ (0.8)	\$ (0.6)	\$ (0.3)	\$ (0.3)	\$ (0.4)	\$ -	\$ -	\$ -	\$ -	\$ (0.3)	\$ (7.8)	\$ (0.1)	\$ (11.3)
FEMA Proceeds	-	50.1	-	-	-	4.1	-	-	-	-	1.7	0.5	0.2	-	-	7.7	-	14.1
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Restoration, Reconstruction & Insurance	\$ (1.0)	\$ 50.0	\$ (1.7)	\$ (0.5)	\$ (0.6)	\$ 3.2	\$ (0.6)	\$ (0.3)	\$ (0.3)	\$ (0.4)	\$ 1.7	\$ 0.5	\$ 0.2	\$ -	\$ (0.3)	\$ (0.2)	\$ (0.1)	\$ 2.8
COMMONWEALTH FUNDING																		
Commonwealth T&D Service Account Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750.0
Total Commonwealth Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750.0
NET CASH FLOW	\$ (32.1)	\$ 56.3	\$ (11.9)	\$ (7.1)	\$ (11.0)	\$ 30.6	\$ 16.4	\$ 16.8	\$ (18.6)	\$ (41.2)	\$ 23.0	\$ 778.6	\$ (15.8)	\$ (6.2)	\$ (33.2)	\$ 26.1	\$ 5.5	\$ 771.2
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 605.5	\$ 573.4	\$ 629.7	\$ 617.8	\$ 610.6	\$ 599.7	\$ 630.3	\$ 646.6	\$ 663.5	\$ 644.9	\$ 603.7	\$ 626.7	\$ 1,405.3	\$ 1,389.5	\$ 1,383.3	\$ 1,350.2	\$ 1,376.3	\$ 610.6
Net Cash Flow	(32.1)	56.3	(11.9)	(7.1)	(11.0)	30.6	16.4	16.8	(18.6)	(41.2)	23.0	778.6	(15.8)	(6.2)	(33.2)	26.1	5.5	771.2
Ending Balance	\$ 573.4	\$ 629.7	\$ 617.8	\$ 610.6	\$ 599.7	\$ 630.3	\$ 646.6	\$ 663.5	\$ 644.9	\$ 603.7	\$ 626.7	\$ 1,405.3	\$ 1,389.5	\$ 1,383.3	\$ 1,350.2	\$ 1,376.3	\$ 1,381.8	\$ 1,381.8
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ -	\$ -	\$ -	\$ -	\$ 0.2	\$ -	\$ -	\$ -	\$ -	\$ 1.7	\$ 0.5	\$ 0.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Insurance Account	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
Other Restricted & Construction Accounts	56.0	56.1	56.1	56.1	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.3	56.3	56.3	56.3	56.3
Total Other Bank Accounts	\$ 88.8	\$ 88.8	\$ 88.8	\$ 88.8	\$ 89.1	\$ 88.9	\$ 88.9	\$ 88.9	\$ 88.9	\$ 90.7	\$ 89.4	\$ 89.1	\$ 88.9	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0
MEMO: OPERATING BANK ACCOUNT DETAILS																		
T&D Front-End Transition Accounts	\$ 63.3	\$ 63.3	\$ 63.3	\$ 63.3	\$ 63.3	\$ 63.3	\$ 50.0	\$ 50.0	\$ 50.0	\$ 35.9	\$ 35.9	\$ 35.9	\$ 35.9	\$ 35.9	\$ 35.9	\$ 35.9	\$ 6.6	\$ 6.6
T&D Service Accounts	-	-	-	-	-	-	-	-	-	122.6	122.6	872.6	872.6	872.6	872.6	872.6	862.8	862.8
Other Operating Accounts	510.0	566.4	554.5	547.3	536.3	566.9	596.6	613.4	594.9	445.2	468.2	496.8	481.0	474.8	441.7	467.8	512.4	512.4
Ending Balance	\$ 573.4	\$ 629.7	\$ 617.8	\$ 610.6	\$ 599.7	\$ 630.3	\$ 646.6	\$ 663.5	\$ 644.9	\$ 603.7	\$ 626.7	\$ 1,405.3	\$ 1,389.5	\$ 1,383.3	\$ 1,350.2	\$ 1,376.3	\$ 1,381.8	\$ 1,381.8



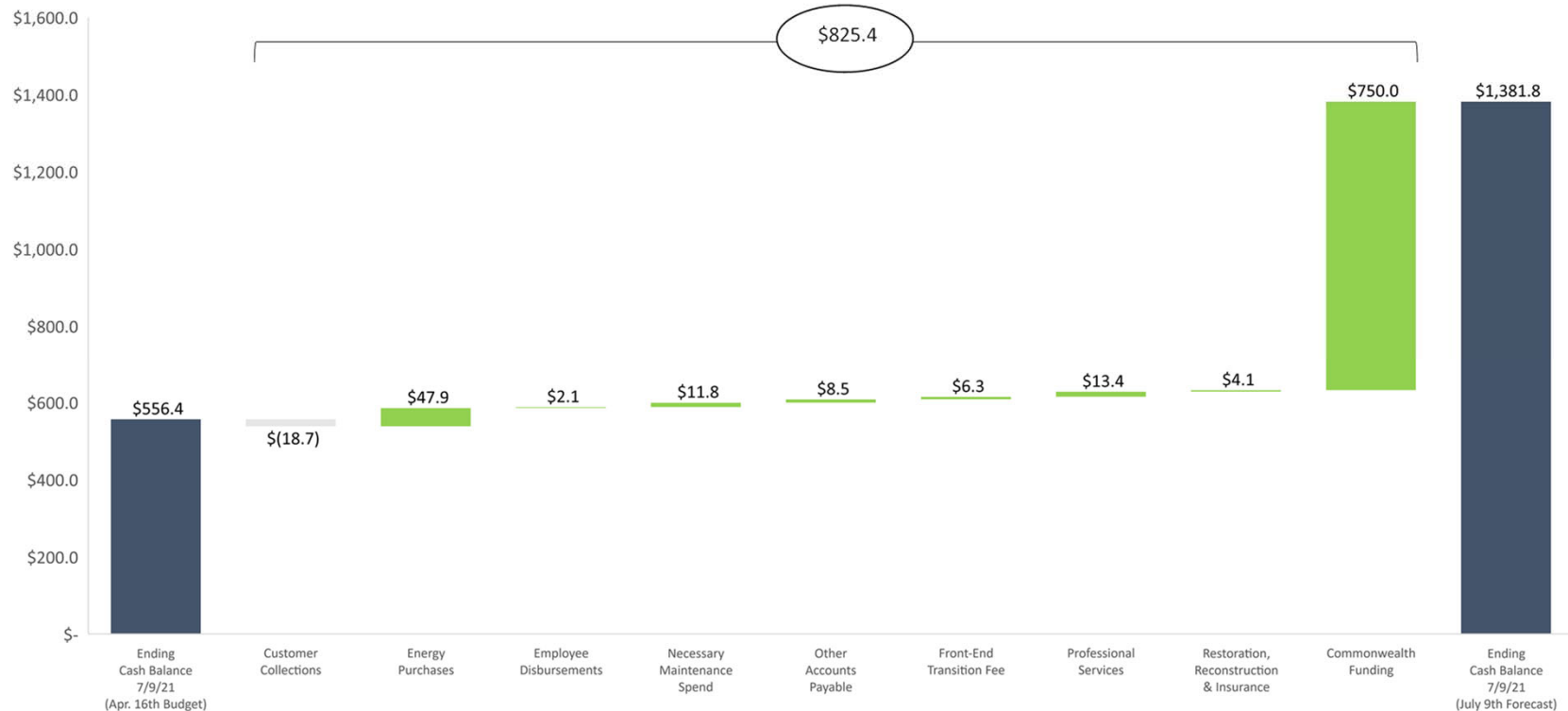
The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change. Additionally, the projections are based on PREPA's existing operations and have not yet been updated to take into account T&D service commencement.

April 16th Budget

(\$ in millions) Week ending	Actual 03/19	Actual 03/26	Actual 04/02	Actual 04/09	1 04/16	2 04/23	3 04/30	4 05/07	5 05/14	6 05/21	7 05/28	8 06/04	9 06/11	10 06/18	11 06/25	12 07/02	13 07/09	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 62.5	\$ 36.7	\$ 40.2	\$ 67.3	\$ 57.6	\$ 59.9	\$ 48.9	\$ 67.4	\$ 55.1	\$ 65.1	\$ 55.1	\$ 55.5	\$ 67.9	\$ 65.6	\$ 55.6	\$ 56.6	\$ 58.1	\$ 768.4
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 62.5	\$ 36.7	\$ 40.2	\$ 67.3	\$ 57.6	\$ 59.9	\$ 48.9	\$ 67.4	\$ 55.1	\$ 65.1	\$ 55.1	\$ 55.5	\$ 67.9	\$ 65.6	\$ 55.6	\$ 56.6	\$ 58.1	\$ 768.4
ENERGY PURCHASES																		
Power purchase - AES	\$ (26.2)	\$ -	\$ -	\$ -	\$ (25.1)	\$ -	\$ -	\$ -	\$ -	\$ (25.6)	\$ -	\$ -	\$ -	\$ (26.9)	\$ -	\$ -	\$ -	\$ (77.6)
Power purchase - EcoElectrica	(15.0)	-	(2.3)	-	(15.1)	-	-	-	-	(15.0)	-	-	-	(15.3)	-	-	-	(45.4)
Power purchase - Renewable sources	(5.8)	-	-	-	-	(7.0)	-	-	-	(7.5)	-	-	-	(7.3)	-	-	-	(21.8)
Fuel purchase - Fleet and storage	(0.3)	-	(0.5)	(1.9)	(0.0)	-	-	-	-	(2.5)	-	-	-	(2.5)	-	-	-	(5.0)
Fuel purchase - Freepoint	(9.4)	(9.4)	(14.0)	(14.5)	-	(5.2)	(15.9)	(5.3)	(11.1)	(11.0)	(5.3)	(16.3)	(10.6)	(10.5)	(10.5)	(5.3)	-	(107.1)
Fuel purchase - Puma	(7.8)	(0.1)	(2.3)	(2.8)	(3.5)	(5.4)	(8.7)	(7.1)	(0.5)	(8.7)	(7.6)	(1.0)	(2.6)	(8.7)	(7.9)	(2.6)	(3.6)	(67.9)
LNG purchase - Naturgy	-	-	-	(42.6)	-	-	-	-	(49.6)	-	-	-	(47.5)	-	-	-	(56.9)	(154.1)
LNG purchase - NFE	-	-	(12.5)	-	-	-	-	(12.1)	-	-	-	(8.6)	-	-	-	(18.0)	-	(38.6)
Total Energy Purchases	\$ (64.3)	\$ (9.5)	\$ (31.5)	\$ (61.8)	\$ (43.7)	\$ (17.7)	\$ (24.5)	\$ (24.5)	\$ (61.2)	\$ (70.3)	\$ (12.9)	\$ (25.9)	\$ (60.7)	\$ (71.1)	\$ (18.4)	\$ (25.9)	\$ (60.6)	\$ (517.5)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ (8.6)	\$ (0.0)	\$ (8.3)	\$ (0.0)	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ -	\$ (8.5)	\$ (59.3)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Benefits	-	(1.3)	-	-	(3.1)	-	-	-	(3.7)	-	-	-	-	(3.7)	-	-	-	(10.5)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Benefits	(4.8)	-	(4.5)	-	(4.7)	-	(4.7)	-	(4.7)	-	(4.7)	-	(4.7)	-	(4.7)	-	(4.7)	(32.9)
Estimated Gross Overtime	(1.6)	-	(1.4)	-	(1.4)	-	(1.4)	-	(1.4)	-	(1.4)	-	(1.4)	-	(1.4)	-	(1.4)	(9.8)
Total Employee Disbursements	\$ (15.0)	\$ (1.3)	\$ (14.2)	\$ (0.0)	\$ (17.7)	\$ -	\$ (14.6)	\$ -	\$ (18.3)	\$ -	\$ (14.6)	\$ -	\$ (14.6)	\$ (3.7)	\$ (14.6)	\$ -	\$ (14.6)	\$ (112.5)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ (0.2)	\$ (1.1)	\$ (4.4)	\$ (0.7)	\$ (0.3)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (1.7)	\$ (20.7)
Other Accounts Payable	(5.8)	(2.4)	1.1	(9.5)	(5.7)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(15.0)	(5.0)	(75.7)
Front-end Transition Services Fee and Expenses	(5.2)	(4.9)	-	-	-	-	(13.2)	-	-	-	(14.1)	-	-	-	-	(15.1)	-	(42.3)
Total Other Operating Disbursements	\$ (11.3)	\$ (8.4)	\$ (3.3)	\$ (10.2)	\$ (6.0)	\$ (6.7)	\$ (19.9)	\$ (6.7)	\$ (6.7)	\$ (6.7)	\$ (20.8)	\$ (6.7)	\$ (6.7)	\$ (6.7)	\$ (6.7)	\$ (31.8)	\$ (6.7)	\$ (138.7)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (3.0)	\$ (4.7)	\$ (0.9)	\$ (0.7)	\$ (0.3)	\$ (1.6)	\$ (7.8)	\$ (1.3)	\$ (1.3)	\$ (1.3)	\$ (6.8)	\$ (1.2)	\$ (1.2)	\$ (1.2)	\$ (1.2)	\$ (6.8)	\$ (1.3)	\$ (33.0)
Legal Services	-	(0.1)	(0.5)	(1.2)	-	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(4.4)
P3 Authority Transaction Costs	-	(4.0)	-	-	-	-	(0.8)	-	-	-	-	(0.8)	-	-	-	(0.8)	-	(2.4)
PREPA Restructuring & Title III	(0.0)	-	-	-	(0.4)	-	(0.5)	(0.7)	(0.1)	(0.1)	(0.8)	(0.8)	(0.1)	(0.1)	(0.1)	(1.7)	(0.1)	(5.3)
FOMB Advisor Costs allocated to PREPA	-	(2.5)	-	-	-	-	(2.5)	-	-	-	-	(2.5)	-	-	-	(2.5)	-	(7.5)
Total Professional Services	\$ (3.1)	\$ (11.2)	\$ (1.4)	\$ (1.8)	\$ (0.6)	\$ (1.9)	\$ (9.4)	\$ (4.9)	\$ (1.8)	\$ (1.8)	\$ (7.9)	\$ (5.6)	\$ (1.6)	\$ (1.6)	\$ (1.6)	\$ (12.1)	\$ (1.8)	\$ (52.6)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ (1.0)	\$ (0.0)	\$ (1.7)	\$ (0.5)	\$ (0.6)	\$ (1.4)	\$ (1.4)	\$ (1.1)	\$ (1.1)	\$ (1.1)	\$ (1.1)	\$ (0.7)	\$ (0.9)	\$ (0.5)	\$ (7.6)	\$ (14.6)	\$ (2.6)	\$ (34.7)
FEMA Proceeds	-	50.1	-	-	-	0.4	1.3	5.2	-	-	0.8	0.2	0.4	0.2	7.5	14.5	2.4	33.0
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	0.4
Total Restoration, Reconstruction & Insurance	\$ (1.0)	\$ 50.0	\$ (1.7)	\$ (0.5)	\$ (0.6)	\$ (0.6)	\$ (0.1)	\$ 4.1	\$ (1.1)	\$ (1.1)	\$ (0.2)	\$ (0.5)	\$ (0.5)	\$ (0.3)	\$ (0.1)	\$ (0.2)	\$ (0.2)	\$ (1.3)
NET CASH FLOW	\$ (32.1)	\$ 56.3	\$ (11.9)	\$ (7.1)	\$ (11.0)	\$ 33.0	\$ (19.6)	\$ 35.5	\$ (33.9)	\$ (14.8)	\$ (1.4)	\$ 16.8	\$ (16.2)	\$ (17.9)	\$ 14.2	\$ (13.3)	\$ (25.6)	\$ (54.2)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 605.5	\$ 573.4	\$ 629.7	\$ 617.8	\$ 610.6	\$ 599.6	\$ 632.6	\$ 613.1	\$ 648.6	\$ 614.7	\$ 599.9	\$ 598.5	\$ 615.3	\$ 599.0	\$ 581.1	\$ 595.3	\$ 582.0	\$ 610.6
Net Cash Flow	(32.1)	56.3	(11.9)	(7.1)	(11.0)	33.0	(19.6)	35.5	(33.9)	(14.8)	(1.4)	16.8	(16.2)	(17.9)	14.2	(13.3)	(25.6)	(54.2)
Ending Balance	\$ 573.4	\$ 629.7	\$ 617.8	\$ 610.6	\$ 599.6	\$ 632.6	\$ 613.1	\$ 648.6	\$ 614.7	\$ 599.9	\$ 598.5	\$ 615.3	\$ 599.0	\$ 581.1	\$ 595.3	\$ 582.0	\$ 556.4	\$ 556.4
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Insurance Account	32.7	32.7	32.7	32.7	32.7	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	42.3	42.3	42.3
Other Restricted & Construction Accounts	56.0	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
Total Other Bank Accounts	\$ 88.8	\$ 88.8	\$ 88.8	\$ 88.8	\$ 88.8	\$ 88.5	\$ 88.5	\$ 88.5	\$ 88.5	\$ 88.5	\$ 88.5	\$ 88.5	\$ 88.5	\$ 88.5	\$ 88.5	\$ 98.5	\$ 98.5	\$ 98.5



April 16th Budget With Actuals Through 7/9 vs April 16th Budget Cash Bridge as of July 9, 2021



- “Customer Collections” variance primarily due to the timing of General Client and Government collections
- “Energy Purchases” variance primarily due to the timing of payments (including a \$56.9 million forecasted payment to Naturgy during the week ended 7/9) and fuel mix
- “Employee Disbursements” aggregate net variance primarily due to the impact of T&D service commencement not included in the April 16th Budget, timing of medical benefit costs and the payment of VTP, health insurance and related social security and Medicare taxes to transitioned employees
- “Necessary Maintenance Spend” variance partially due to lower than forecasted maintenance spend and timing of disbursements
- “Other Accounts Payable” variance primarily due to the timing of disbursements and the impact of check receipts and disbursements clearing our operating accounts
- “Front-End Transition Fee” variance primarily due to the timing of payments to Luma
- “Professional Services” variance primarily due to timing of payments to the P3 Authority, PREPA Restructuring & Title III advisors and FOMB Advisor Costs allocated to PREPA



**Puerto Rico
Electric Power
Authority**

Puerto Rico Electric Power Authority

13-Week Cash Flow Update

October 13, 2021

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Puerto Rico
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Table of Contents

- General Overview
- July 16th Budget updated for actuals through 10/8/21
- July 16th Budget
- July 16th Budget With Actuals Through 10/8 vs July 16th Budget Cash Bridge

General Overview

- The July 16th Budget With Actuals Through 10/8 vs July 16th Budget Cash Bridge captures the cumulative variance from 7/9/21 through 10/8/21
- Any timing related variances from actual weeks have not been re-timed into future periods for purposes of this analysis

The projections set forth in this report are based on cash flow projections prepared by PREPA.

On September 20, 2021, Governor Pedro R. Pierluisi issued Executive Order 2021-070. Executive Order 2021-070 extends the effective date of Executive Order 2021-065 through October 14, 2021. Executive Order 2021-065 expands the temporary restrictions in certain private and commercial activities, the use of face masks and limits elective surgery. Curfew hours are imposed for certain private activities with the public from 12:00 a.m. to 5:00 a.m.. Excluded from the curfew are those private operations that do not receive the public, such as manufacturing, construction, distribution and agricultural industries, among others. Bars and restaurants that do not require proof of COVID-19 vaccination will need to reduce their occupancy rate to 50%.

The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.

The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.

July 16th Budget With Actuals Through 10/8

(\$ in millions) Week ending	Actual 06/18	Actual 06/25	Actual 07/02	Actual 07/09	Actual 07/16	Actual 07/23	Actual 07/30	Actual 08/06	Actual 08/13	Actual 08/20	Actual 08/27	Actual 09/03	Actual 09/10	Actual 09/17	Actual 09/24	Actual 10/01	Actual 10/08	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 66.9	\$ 61.7	\$ 73.3	\$ 47.9	\$ 57.1	\$ 55.1	\$ 62.1	\$ 71.0	\$ 59.4	\$ 64.8	\$ 55.9	\$ 75.8	\$ 55.4	\$ 69.2	\$ 78.9	\$ 68.4	\$ 61.3	\$ 834.4
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 66.9	\$ 61.7	\$ 73.3	\$ 47.9	\$ 57.1	\$ 55.1	\$ 62.1	\$ 71.0	\$ 59.4	\$ 64.8	\$ 55.9	\$ 75.8	\$ 55.4	\$ 69.2	\$ 78.9	\$ 68.4	\$ 61.3	\$ 834.4
ENERGY PURCHASES																		
Power purchase - AES	\$ (26.7)	\$ -	\$ -	\$ -	\$ -	\$ (24.9)	\$ -	\$ -	\$ -	\$ (18.6)	\$ -	\$ -	\$ -	\$ (23.7)	\$ -	\$ -	\$ -	\$ (67.1)
Power purchase - EcoElectrica	(15.1)	-	-	-	-	(14.9)	-	-	-	(14.7)	-	-	-	(16.8)	-	-	-	(46.5)
Power purchase - Renewable sources	(3.6)	(5.2)	-	(1.0)	-	(6.8)	-	-	(2.7)	(0.9)	-	-	-	(9.1)	(2.5)	(1.0)	-	(23.0)
Fuel purchase - Fleet and storage	(0.0)	(0.0)	(1.9)	(0.0)	-	-	(0.1)	(0.5)	-	-	(0.2)	(1.3)	(0.3)	(0.0)	(0.0)	(6.0)	(0.6)	(9.1)
Fuel purchase - Freepoint	(10.2)	(11.3)	(11.6)	(13.1)	(13.4)	(11.5)	(11.1)	(16.1)	(5.7)	(16.8)	(11.3)	(11.4)	(5.5)	(11.4)	(17.0)	(11.4)	(11.2)	(153.8)
Fuel purchase - Puma	(6.1)	(9.1)	(0.3)	(6.9)	(6.4)	(8.4)	(5.7)	(6.1)	(4.0)	(12.4)	(6.7)	(13.9)	(3.2)	(6.9)	(10.1)	(5.7)	(11.7)	(101.3)
LNG purchase - Naturgy	-	-	-	-	(47.9)	-	-	-	(58.5)	-	-	-	(66.6)	-	-	-	(61.0)	(233.9)
LNG purchase - NFE	-	-	(13.9)	-	-	-	-	(18.6)	-	-	-	(25.3)	-	-	-	(26.4)	-	(70.2)
Total Energy Purchases	\$ (61.8)	\$ (25.6)	\$ (27.6)	\$ (21.0)	\$ (67.7)	\$ (66.5)	\$ (16.9)	\$ (41.3)	\$ (70.8)	\$ (63.4)	\$ (18.2)	\$ (51.9)	\$ (75.6)	\$ (68.0)	\$ (29.6)	\$ (50.5)	\$ (84.5)	\$ (705.0)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ (0.0)	\$ (29.9)	\$ (0.1)	\$ (2.0)	\$ (1.4)	\$ (2.0)	\$ (0.0)	\$ (2.4)	\$ -	\$ (2.2)	\$ -	\$ (3.2)	\$ (0.1)	\$ (3.3)	\$ -	\$ (3.1)	\$ (0.9)	\$ (18.5)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Benefits	-	-	-	-	-	-	(6.2)	-	-	-	-	-	-	(2.8)	-	-	-	(9.1)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Benefits	-	(3.4)	-	(1.1)	-	(1.1)	-	(1.0)	-	(1.0)	-	(1.9)	-	(1.0)	-	(1.0)	-	(7.0)
Estimated Gross Overtime	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.3)	-	(0.3)	-	(0.4)	-	(0.4)	-	(2.2)
GridCo Employee Disbursements	-	-	-	(9.6)	-	(7.0)	-	(7.4)	-	(7.5)	-	(9.4)	-	(7.5)	-	(9.9)	-	(48.7)
Total Employee Disbursements	\$ (0.0)	\$ (33.7)	\$ (0.1)	\$ (13.1)	\$ (1.4)	\$ (10.4)	\$ (6.2)	\$ (11.1)	\$ -	\$ (11.0)	\$ -	\$ (14.8)	\$ (0.1)	\$ (15.1)	\$ -	\$ (14.4)	\$ (0.9)	\$ (85.5)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ -	\$ (3.3)	\$ (1.5)	\$ (0.0)	\$ (1.3)	\$ -	\$ (1.9)	\$ -	\$ (0.2)	\$ (2.1)	\$ (1.8)	\$ (3.0)	\$ (1.1)	\$ (0.3)	\$ (0.4)	\$ -	\$ (2.0)	\$ (14.2)
Other Accounts Payable	(11.2)	(5.1)	(11.0)	(5.3)	(7.6)	2.0	(37.0)	(2.1)	0.3	(8.0)	5.9	(41.1)	(9.1)	2.0	(9.1)	(11.5)	9.2	(106.0)
FET and Operator Service Fees	-	(13.3)	-	-	-	-	-	-	-	(6.6)	-	-	-	(29.2)	-	(9.7)	-	(45.6)
Total Other Operating Disbursements	\$ (11.2)	\$ (21.6)	\$ (12.6)	\$ (5.3)	\$ (8.9)	\$ 2.0	\$ (39.0)	\$ (2.1)	\$ 0.0	\$ (16.7)	\$ 4.0	\$ (44.1)	\$ (10.1)	\$ (27.5)	\$ (9.6)	\$ (21.2)	\$ 7.3	\$ (165.8)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (0.1)	\$ (13.5)	\$ (5.9)	\$ (2.1)	\$ (5.5)	\$ (0.8)	\$ (0.3)	\$ (0.9)	\$ (0.1)	\$ (1.5)	\$ (3.2)	\$ (2.1)	\$ (0.1)	\$ (0.3)	\$ (3.4)	\$ (6.9)	\$ (3.4)	\$ (28.6)
Legal Services	-	(0.1)	(0.0)	(0.7)	-	(0.4)	-	(0.0)	(0.5)	(0.3)	(0.1)	(0.0)	-	(0.0)	-	(0.9)	(0.5)	(2.9)
P3 Authority Transaction Costs	-	-	(0.8)	-	-	-	-	-	-	-	-	-	-	(0.8)	-	-	-	(0.8)
PREPA Restructuring & Title III	-	-	-	(0.1)	(0.1)	-	-	(0.7)	-	-	-	-	(0.6)	(1.7)	-	(0.6)	-	(3.7)
FOMB Advisor Costs allocated to PREPA	-	-	-	(4.6)	-	-	-	-	-	-	-	-	(13.0)	-	-	-	-	(17.5)
Total Professional Services	\$ (0.1)	\$ (13.6)	\$ (6.7)	\$ (2.9)	\$ (10.2)	\$ (1.2)	\$ (0.3)	\$ (1.6)	\$ (0.6)	\$ (1.8)	\$ (3.3)	\$ (2.1)	\$ (0.8)	\$ (15.7)	\$ (3.4)	\$ (8.4)	\$ (4.0)	\$ (53.4)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ -	\$ (0.3)	\$ (7.8)	\$ (0.1)	\$ (0.2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (0.0)	\$ -	\$ -	\$ (0.2)
FEMA Proceeds	-	-	7.7	-	0.8	-	-	0.2	0.4	1.4	0.8	-	1.3	-	0.4	-	-	5.4
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	-	-	-	-	-	-	10.0	-	-	-	-	-	-	-	10.0
Permanent Work	-	-	-	-	(1.4)	(1.3)	-	(0.5)	(0.6)	(0.5)	(0.9)	(0.9)	(1.2)	-	(0.2)	(0.4)	(0.4)	(8.0)
Total Restoration, Reconstruction & Insurance	\$ -	\$ (0.3)	\$ (0.2)	\$ (0.1)	\$ (0.7)	\$ (1.3)	\$ -	\$ (0.3)	\$ (0.2)	\$ 10.9	\$ (0.1)	\$ (0.9)	\$ 0.1	\$ -	\$ 0.2	\$ (0.4)	\$ (0.4)	\$ 7.2
COMMONWEALTH FUNDING																		
Commonwealth T&D Service Account Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Commonwealth Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET CASH FLOW	\$ (6.2)	\$ (33.2)	\$ 26.1	\$ 5.5	\$ (31.7)	\$ (22.2)	\$ (0.3)	\$ 14.6	\$ (12.1)	\$ (17.3)	\$ 38.4	\$ (38.1)	\$ (31.1)	\$ (57.1)	\$ 36.6	\$ (26.6)	\$ (21.1)	\$ (168.0)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 1,389.5	\$ 1,363.3	\$ 1,350.2	\$ 1,376.3	\$ 1,381.8	\$ 1,350.1	\$ 1,327.9	\$ 1,327.5	\$ 1,342.1	\$ 1,330.0	\$ 1,312.8	\$ 1,351.2	\$ 1,313.1	\$ 1,282.0	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,381.8
Net Cash Flow	(6.2)	(33.2)	26.1	5.5	(31.7)	(22.2)	(0.3)	14.6	(12.1)	(17.3)	38.4	(38.1)	(31.1)	(57.1)	36.6	(26.6)	(21.1)	(168.0)
Ending Balance	\$ 1,383.3	\$ 1,350.2	\$ 1,376.3	\$ 1,381.8	\$ 1,350.1	\$ 1,327.9	\$ 1,327.5	\$ 1,342.1	\$ 1,330.0	\$ 1,312.8	\$ 1,351.2	\$ 1,313.1	\$ 1,282.0	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,213.8	\$ 1,213.8
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.4	\$ 0.1	\$ -	\$ -	\$ 0.6	\$ -	\$ 0.4	\$ -	\$ -	\$ 3.9	\$ 3.9
Insurance Account	32.7	32.7	32.7	32.7	32.7	32.7	32.7	42.7	42.7	32.7	32.7	32.7	36.1	37.2	37.8	37.8	32.7	32.7
Other Restricted & Construction Accounts	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
Total Other Bank Accounts	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 99.4	\$ 99.1	\$ 89.0	\$ 89.0	\$ 89.7	\$ 92.4	\$ 93.8	\$ 94.1	\$ 94.1	\$ 92.9	\$ 92.9
MEMO: OPERATING BANK ACCOUNT DETAILS																		
T&D Front-End Transition Accounts	\$ 35.9	\$ 35.9	\$ 35.9	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D Service Accounts	872.6	872.6	872.6	862.5	862.8	855.5	855.4	847.5	847.4	838.7	838.1	827.8	827.7	790.6	789.7	765.5	761.3	761.3
Other Operating Accounts	474.8	441.7	467.8	512.4	480.7	465.8	465.5	488.1	476.0	467.4	506.5	485.3	454.3	434.2	471.8	469.4	452.4	452.4
Ending Balance	\$ 1,383.3	\$ 1,350.2	\$ 1,376.3	\$ 1,381.8	\$ 1,350.1	\$ 1,327.9	\$ 1,327.5	\$ 1,342.1	\$ 1,330.0	\$ 1,312.8	\$ 1,351.2	\$ 1,313.1	\$ 1,282.0	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,213.8	\$ 1,213.8



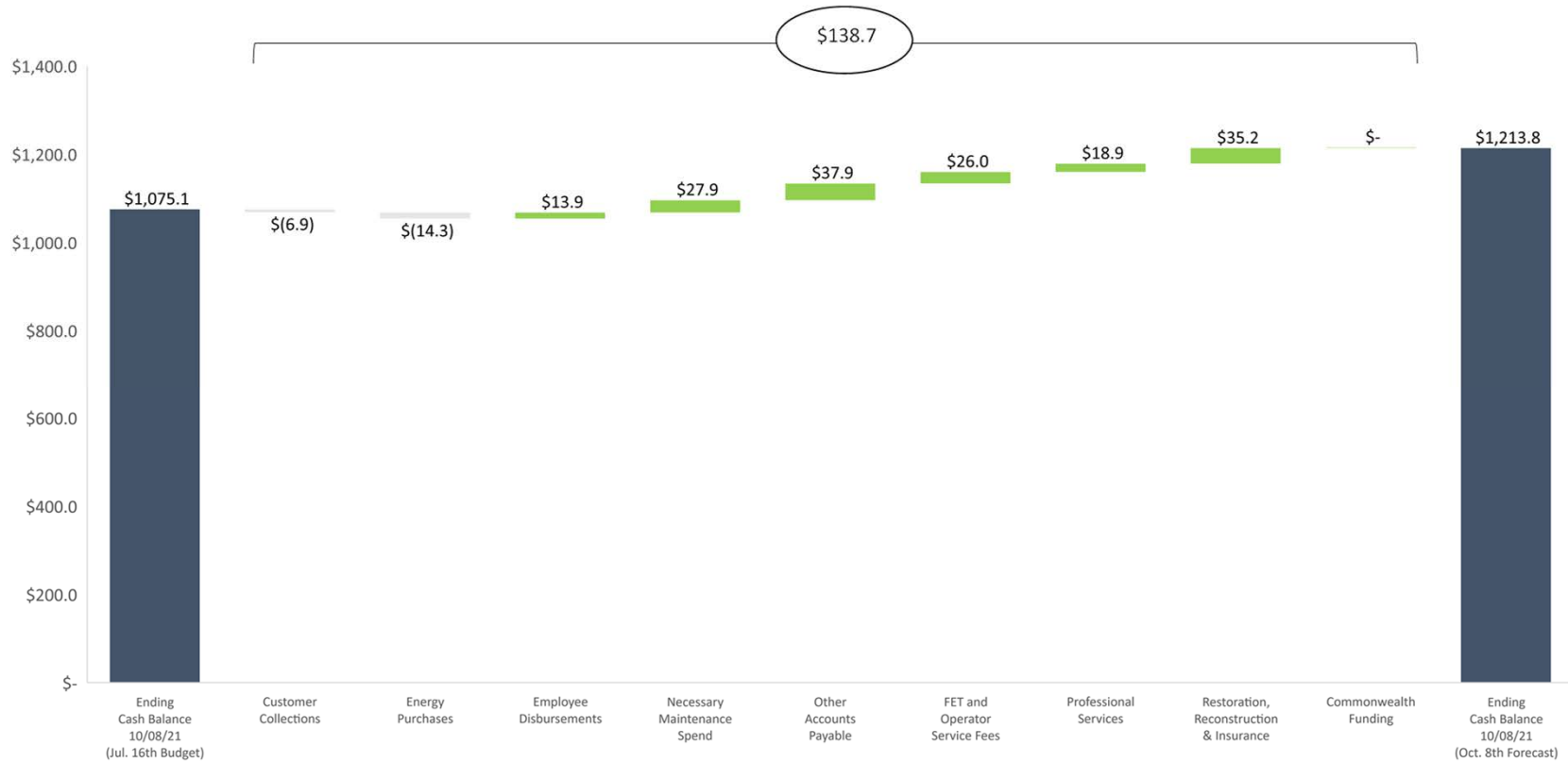
The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.

July 16th Budget

(\$ in millions) Week ending	Actual 06/18	Actual 06/25	Actual 07/02	Actual 07/09	1 07/16	2 07/23	3 07/30	4 08/06	5 08/13	6 08/20	7 08/27	8 09/03	9 09/10	10 09/17	11 09/24	12 10/01	13 10/08	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 66.9	\$ 61.7	\$ 73.3	\$ 47.9	\$ 57.3	\$ 53.3	\$ 60.6	\$ 60.5	\$ 71.4	\$ 60.5	\$ 60.5	\$ 64.6	\$ 67.4	\$ 77.9	\$ 67.4	\$ 68.3	\$ 71.7	\$ 841.3
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 66.9	\$ 61.7	\$ 73.3	\$ 47.9	\$ 57.3	\$ 53.3	\$ 60.6	\$ 60.5	\$ 71.4	\$ 60.5	\$ 60.5	\$ 64.6	\$ 67.4	\$ 77.9	\$ 67.4	\$ 68.3	\$ 71.7	\$ 841.3
ENERGY PURCHASES																		
Power purchase - AES	\$ (26.7)	\$ -	\$ -	\$ -	\$ -	\$ (24.9)	\$ -	\$ -	\$ -	\$ (18.4)	\$ -	\$ -	\$ -	\$ (27.0)	\$ -	\$ -	\$ -	\$ (70.2)
Power purchase - EcoElectrica	(15.1)	-	-	-	-	(14.9)	-	-	-	(14.7)	-	-	-	(15.0)	-	-	-	(44.7)
Power purchase - Renewable sources	(3.6)	(5.2)	-	(1.0)	-	(7.5)	(0.4)	-	-	(6.8)	-	-	-	(8.3)	-	-	-	(23.0)
Fuel purchase - Fleet and storage	(0.0)	(0.0)	(1.9)	(0.0)	-	(0.6)	-	-	-	(2.5)	-	-	-	(2.5)	-	-	-	(5.6)
Fuel purchase - Freeport	(10.2)	(11.3)	(11.6)	(13.1)	(13.4)	(11.5)	(11.1)	(16.1)	(5.7)	(16.8)	(11.3)	(17.2)	(11.5)	(5.8)	(17.3)	(11.5)	(11.4)	(160.5)
Fuel purchase - Puma	(6.1)	(9.1)	(0.3)	(6.9)	(7.4)	(9.4)	(5.7)	(6.3)	(4.4)	(9.8)	(11.8)	(2.9)	(8.6)	(6.5)	(8.4)	(8.9)	(3.1)	(93.2)
LNG purchase - Naturgy	-	-	-	-	(47.9)	-	-	-	(58.5)	-	-	-	(62.0)	-	-	-	(53.4)	(221.8)
LNG purchase - NFE	-	-	(13.9)	-	-	-	-	(18.6)	-	-	(9.0)	(25.3)	-	-	-	(18.8)	-	(71.8)
Total Energy Purchases	\$ (61.8)	\$ (25.6)	\$ (27.6)	\$ (21.0)	\$ (68.7)	\$ (68.7)	\$ (17.2)	\$ (41.0)	\$ (68.6)	\$ (68.9)	\$ (32.1)	\$ (45.4)	\$ (82.1)	\$ (65.2)	\$ (25.7)	\$ (39.2)	\$ (67.9)	\$ (690.7)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ (0.0)	\$ (29.9)	\$ (0.1)	\$ (2.0)	\$ (1.4)	\$ (3.8)	\$ -	\$ (4.1)	\$ -	\$ (4.1)	\$ -	\$ (4.1)	\$ -	\$ (4.1)	\$ -	\$ (4.1)	\$ -	\$ (25.7)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Benefits	-	-	-	-	-	(6.2)	-	(0.0)	-	-	(3.5)	(0.1)	-	(1.4)	(0.8)	-	-	(12.1)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	(1.0)	-	-	-	-	-	-	(1.0)
Other Benefits	-	(3.4)	-	(1.1)	-	(0.7)	-	(1.1)	-	(1.1)	-	(1.1)	-	(1.1)	-	(1.1)	-	(6.2)
Estimated Gross Overtime	-	(0.4)	-	(0.4)	-	(0.6)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(2.6)
GridCo Employee Disbursements	-	-	-	-	-	(7.1)	-	(9.0)	-	(7.4)	(2.0)	(9.3)	-	(7.7)	-	(9.5)	-	(52.0)
Total Employee Disbursements	\$ (0.0)	\$ (33.7)	\$ (0.1)	\$ (3.4)	\$ (1.4)	\$ (18.4)	\$ -	\$ (14.6)	\$ -	\$ (13.0)	\$ (6.5)	\$ (15.0)	\$ -	\$ (13.3)	\$ (1.4)	\$ (15.9)	\$ -	\$ (99.4)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ -	\$ (3.3)	\$ (1.5)	\$ (0.0)	\$ (1.3)	\$ (1.0)	\$ (1.0)	\$ (1.8)	\$ (3.8)	\$ (3.8)	\$ (3.8)	\$ (4.0)	\$ (4.2)	\$ (4.2)	\$ (4.2)	\$ (3.7)	\$ (5.2)	\$ (42.1)
Other Accounts Payable	(11.2)	(5.1)	(11.0)	(14.9)	(3.3)	(33.2)	(5.5)	(6.6)	(6.6)	(16.6)	(32.8)	(6.6)	(6.6)	(6.6)	(6.6)	(6.6)	(6.6)	(143.9)
FET and Operator Service Fees	-	(13.3)	-	-	-	-	(16.4)	-	-	(21.7)	(9.7)	(14.0)	-	-	(9.7)	-	-	(71.6)
Total Other Operating Disbursements	\$ (11.2)	\$ (21.6)	\$ (12.6)	\$ (14.9)	\$ (4.6)	\$ (34.2)	\$ (22.8)	\$ (8.4)	\$ (10.4)	\$ (42.1)	\$ (46.4)	\$ (24.5)	\$ (10.8)	\$ (10.8)	\$ (20.5)	\$ (10.3)	\$ (11.8)	\$ (257.6)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (0.1)	\$ (13.5)	\$ (5.9)	\$ (2.1)	\$ (5.5)	\$ (1.3)	\$ (3.2)	\$ (6.2)	\$ (3.1)	\$ (3.1)	\$ (3.4)	\$ (5.6)	\$ (2.6)	\$ (2.6)	\$ (2.6)	\$ (5.1)	\$ (2.6)	\$ (46.9)
Legal Services	-	(0.1)	(0.0)	(0.7)	-	(0.2)	(0.2)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(4.7)
P3 Authority Transaction Costs	-	-	(0.8)	-	-	-	-	-	(1.6)	-	-	-	(0.4)	-	-	-	(0.4)	(2.4)
PREPA Restructuring & Title III	-	-	(0.1)	-	(0.1)	-	(2.0)	-	-	-	(0.3)	(0.4)	(0.4)	(0.5)	(0.5)	(0.5)	(1.0)	(6.3)
FOMB Advisor Costs allocated to PREPA	-	-	-	-	(4.6)	-	-	-	(2.5)	-	-	-	(2.5)	-	-	-	(2.5)	(12.1)
Total Professional Services	\$ (0.1)	\$ (13.6)	\$ (6.7)	\$ (2.9)	\$ (10.1)	\$ (1.5)	\$ (5.5)	\$ (6.6)	\$ (7.6)	\$ (3.5)	\$ (4.1)	\$ (6.5)	\$ (7.0)	\$ (3.4)	\$ (3.5)	\$ (6.0)	\$ (6.9)	\$ (72.3)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ -	\$ (0.3)	\$ (7.8)	\$ (0.1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2.8)	\$ -	\$ (6.8)	\$ -	\$ -	\$ (0.3)	\$ (9.8)
FEMA Proceeds	-	-	7.7	-	-	-	-	-	-	-	0.7	2.8	-	8.4	0.2	1.2	0.3	13.6
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	-	-	-	-	-	10.0	5.0	2.5	2.5	-	-	-	-	-	20.0
Permanent Work	-	-	-	-	(1.4)	(0.9)	(0.9)	(0.9)	(1.3)	(1.3)	(1.3)	(1.3)	(7.2)	(7.2)	(7.2)	(7.2)	(13.8)	(51.8)
Total Restoration, Reconstruction & Insurance	\$ -	\$ (0.3)	\$ (0.2)	\$ (0.1)	\$ (1.4)	\$ (0.9)	\$ (0.9)	\$ (0.9)	\$ 8.7	\$ 3.7	\$ 1.9	\$ 1.2	\$ (7.2)	\$ (5.6)	\$ (7.0)	\$ (6.0)	\$ (13.8)	\$ (28.1)
COMMONWEALTH FUNDING																		
Commonwealth T&D Service Account Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Commonwealth Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET CASH FLOW	\$ (6.2)	\$ (33.2)	\$ 26.1	\$ 5.5	\$ (28.8)	\$ (70.4)	\$ 14.2	\$ (11.0)	\$ (6.8)	\$ (63.4)	\$ (26.7)	\$ (25.5)	\$ (39.8)	\$ (20.3)	\$ 9.2	\$ (9.1)	\$ (28.6)	\$ (306.7)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 1,389.5	\$ 1,383.3	\$ 1,350.2	\$ 1,376.3	\$ 1,381.8	\$ 1,353.0	\$ 1,282.6	\$ 1,296.8	\$ 1,285.8	\$ 1,279.2	\$ 1,215.9	\$ 1,189.2	\$ 1,163.7	\$ 1,123.9	\$ 1,103.6	\$ 1,112.8	\$ 1,103.7	\$ 1,381.8
Net Cash Flow	(6.2)	(33.2)	26.1	5.5	(28.8)	(70.4)	14.2	(11.0)	(6.8)	(63.4)	(26.7)	(25.5)	(39.8)	(20.3)	9.2	(9.1)	(28.6)	(306.7)
Ending Balance	\$ 1,383.3	\$ 1,350.2	\$ 1,376.3	\$ 1,381.8	\$ 1,353.0	\$ 1,282.6	\$ 1,296.8	\$ 1,285.8	\$ 1,279.2	\$ 1,215.9	\$ 1,189.2	\$ 1,163.7	\$ 1,123.9	\$ 1,103.6	\$ 1,112.8	\$ 1,103.7	\$ 1,075.1	\$ 1,075.1
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Insurance Account	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
Other Restricted & Construction Accounts	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
Total Other Bank Accounts	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0	\$ 89.0



July 16th Budget With Actuals Through 10/8 vs July 16th Budget Cash Bridge as of October 8, 2021



- “Energy Purchases: variance primarily related to fuel mix and lower than forecasted LNG spend
- “Employee Disbursements” variance primarily related to timing, including assumed vacation payouts to transitioned PREPA employees
- “Necessary Maintenance Spend” variance primarily due to timing of GridCo related payments
- “Other Accounts Payable” variance primarily due to lower than forecasted GridCo disbursements and timing of check receipts and disbursements clearing PREPA’s operating accounts
- “FET and Operator Service Fees” variance due to the timing of payments to Luma
- “Professional Services” variance primarily due to the timing of payments related to Title III and Non-Title III legal and professional fees (including vegetation management)
- “Restoration, Reconstruction & Insurance” variance primarily due to timing of GridCo related permanent work



**Puerto Rico
Electric Power
Authority**



**Puerto Rico
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Puerto Rico Electric Power Authority

13-Week Cash Flow Update

January 12, 2022

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Puerto Rico
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Table of Contents

- General Overview
- October 15th Budget updated for actuals through 1/7/22
- October 15th Budget
- October 15th Budget With Actuals Through 1/7 vs October 15th Budget Cash Bridge

General Overview

- The October 15th Budget With Actuals Through 1/7 vs October 15th Budget Cash Bridge captures the cumulative variance from 10/8/21 through 1/7/22
- Any timing related variances from actual weeks have not been re-timed into future periods for purposes of this analysis

The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.

October 15th Budget With Actuals Through 1/7

(\$ in millions) Week ending	Actual 09/17	Actual 09/24	Actual 10/01	Actual 10/08	Actual 10/15	Actual 10/22	Actual 10/29	Actual 11/05	Actual 11/12	Actual 11/19	Actual 11/26	Actual 12/03	Actual 12/10	Actual 12/17	Actual 12/24	Actual 12/31	Actual 01/07	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 69.2	\$ 78.9	\$ 68.4	\$ 61.3	\$ 59.9	\$ 68.0	\$ 62.1	\$ 67.9	\$ 78.5	\$ 76.2	\$ 48.6	\$ 89.6	\$ 68.6	\$ 70.9	\$ 50.7	\$ 54.9	\$ 57.3	\$ 853.0
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 69.2	\$ 78.9	\$ 68.4	\$ 61.3	\$ 59.9	\$ 68.0	\$ 62.1	\$ 67.9	\$ 78.5	\$ 76.2	\$ 48.6	\$ 89.6	\$ 68.6	\$ 70.9	\$ 50.7	\$ 54.9	\$ 57.3	\$ 853.0
ENERGY PURCHASES																		
Power purchase - AES	\$ (23.7)	\$ -	\$ -	\$ -	\$ -	\$ (23.3)	\$ -	\$ -	\$ -	\$ (25.2)	\$ -	\$ -	\$ -	\$ (25.1)	\$ -	\$ -	\$ -	\$ (73.5)
Power purchase - Eco Electrica	(16.8)	-	-	-	-	(15.3)	-	-	-	(14.8)	-	-	-	(15.3)	-	-	-	(45.4)
Power purchase - Renewable sources	(9.1)	(2.5)	(1.0)	-	(0.7)	(6.0)	-	-	-	(5.4)	-	-	-	(5.1)	-	-	-	(17.3)
Fuel purchase - Fleet and storage	(0.0)	(0.0)	(6.0)	(0.6)	(0.0)	-	(0.3)	(0.2)	(4.1)	(0.1)	(0.1)	(0.0)	(0.0)	(0.1)	(0.0)	(0.0)	-	(4.8)
Fuel purchase - Bunker C	(11.4)	(17.0)	(11.4)	(11.2)	(5.6)	(10.9)	(10.4)	(11.1)	(14.2)	(17.1)	(17.7)	(12.1)	(28.8)	(12.7)	(19.1)	(23.7)	(14.7)	(198.3)
Fuel purchase - Diesel	(6.9)	(10.1)	(5.7)	(11.7)	(7.3)	(15.7)	(14.0)	(14.3)	(28.4)	(7.3)	-	(0.3)	(0.3)	(44.3)	(11.1)	(10.1)	(3.7)	(156.8)
LNG purchase - Naturgy	-	-	-	(61.0)	-	-	-	-	(37.0)	-	-	(54.6)	-	-	-	-	(30.8)	(122.4)
LNG purchase - NFE	-	-	(26.4)	-	-	-	-	(24.4)	-	-	-	(15.0)	-	-	-	-	-	(39.4)
Total Energy Purchases	\$ (68.0)	\$ (29.6)	\$ (50.5)	\$ (84.5)	\$ (13.7)	\$ (71.1)	\$ (24.7)	\$ (50.0)	\$ (83.8)	\$ (69.9)	\$ (17.8)	\$ (82.0)	\$ (29.1)	\$ (102.5)	\$ (30.2)	\$ (33.8)	\$ (49.3)	\$ (657.9)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ (3.3)	\$ -	\$ (3.1)	\$ (0.9)	\$ (2.8)	\$ (0.0)	\$ (3.4)	\$ -	\$ (2.8)	\$ -	\$ (2.3)	\$ (0.0)	\$ (2.3)	\$ -	\$ (2.3)	\$ (0.0)	\$ (2.0)	\$ (18.0)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	(1.6)	-	-	-	-	-	(1.6)
Medical Benefits	(2.8)	-	-	-	(4.0)	-	(1.1)	-	(1.8)	-	-	-	-	-	-	(1.7)	-	(8.6)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Benefits	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(0.9)	-	(0.4)	-	(3.5)	(1.3)	(1.0)	(10.2)
Estimated Gross Overtime	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.3)	(2.5)
GridCo Employee Disbursements	(7.5)	-	(9.9)	-	(9.0)	-	(9.7)	-	(7.4)	-	(10.0)	-	(8.2)	-	(10.9)	-	(9.0)	(64.2)
Total Employee Disbursements	\$ (15.1)	\$ -	\$ (14.4)	\$ (0.9)	\$ (17.2)	\$ (0.0)	\$ (15.6)	\$ -	\$ (13.3)	\$ -	\$ (13.5)	\$ (1.6)	\$ (11.4)	\$ -	\$ (17.2)	\$ (3.0)	\$ (12.3)	\$ (163.7)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ (0.3)	\$ (0.4)	\$ -	\$ (2.0)	\$ (4.2)	\$ (0.8)	\$ (0.4)	\$ (3.2)	\$ -	\$ (0.2)	\$ (2.2)	\$ (0.9)	\$ -	\$ -	\$ (0.5)	\$ -	\$ -	\$ (12.3)
Other Accounts Payable	2.0	(9.1)	(11.5)	4.2	(7.4)	(7.5)	(5.7)	0.7	(19.5)	(10.1)	2.2	(9.6)	(13.2)	(7.9)	9.6	(4.4)	(13.8)	(86.7)
FET and Operator Service Fees	(29.2)	-	(9.7)	-	-	-	(9.7)	-	-	-	-	(9.7)	(35.6)	-	(9.7)	-	-	(64.8)
Total Other Operating Disbursements	\$ (27.5)	\$ (9.6)	\$ (21.2)	\$ 2.2	\$ (11.6)	\$ (8.3)	\$ (15.8)	\$ (2.5)	\$ (19.5)	\$ (10.2)	\$ 0.0	\$ (20.2)	\$ (48.8)	\$ (7.9)	\$ (0.6)	\$ (4.4)	\$ (13.8)	\$ (163.7)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (0.3)	\$ (3.4)	\$ (6.9)	\$ (3.4)	\$ (8.4)	\$ (0.4)	\$ (7.1)	\$ (3.3)	\$ (3.0)	\$ (0.7)	\$ (1.7)	\$ (2.8)	\$ (1.0)	\$ (9.3)	\$ (1.1)	\$ (0.6)	\$ -	\$ (39.3)
Legal Services	(0.0)	-	(0.9)	(0.5)	(0.1)	(0.2)	(0.0)	(0.0)	(2.7)	(0.0)	-	(0.1)	(1.0)	(0.5)	-	(0.2)	-	(5.0)
P3 Authority Transaction Costs	(0.8)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PREPA Restructuring & Title III	(1.7)	-	(0.6)	-	-	-	-	-	(0.5)	-	(0.0)	-	(0.4)	-	-	(1.3)	-	(2.3)
FOMB Advisor Costs allocated to PREPA	(13.0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Professional Services	\$ (15.7)	\$ (3.4)	\$ (8.4)	\$ (4.0)	\$ (8.5)	\$ (0.6)	\$ (7.1)	\$ (3.3)	\$ (6.2)	\$ (0.7)	\$ (1.7)	\$ (3.0)	\$ (2.4)	\$ (9.8)	\$ (1.1)	\$ (2.2)	\$ -	\$ (46.6)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ -	\$ (0.0)	\$ -	\$ -	\$ (0.1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (0.1)
FEMA Proceeds / Other Federal Funding	-	0.4	-	-	0.3	-	-	-	-	-	-	-	2.8	76.0	(0.2)	-	-	78.8
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	5.0	-	-	13.0	-	-	-	4.2	-	-	-	-	-	-	17.2
Permanent Work	-	(0.2)	(0.4)	(0.4)	(0.6)	(2.2)	(0.0)	(0.6)	(0.1)	(0.2)	(0.6)	(1.1)	(1.2)	(0.6)	-	(0.9)	-	(8.1)
Total Restoration, Reconstruction & Insurance	\$ -	\$ 0.2	\$ (0.4)	\$ 4.7	\$ (0.4)	\$ (2.2)	\$ 13.0	\$ (0.6)	\$ (0.1)	\$ (0.2)	\$ 3.6	\$ (1.1)	\$ 1.6	\$ 75.4	\$ (0.2)	\$ (0.9)	\$ -	\$ 87.9
COMMONWEALTH FUNDING																		
Commonwealth T&D Service Account Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Commonwealth Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET CASH FLOW	\$ (57.1)	\$ 36.6	\$ (26.6)	\$ (21.1)	\$ 8.5	\$ (14.3)	\$ 11.8	\$ 11.5	\$ (44.5)	\$ (4.8)	\$ 19.2	\$ (18.2)	\$ (21.5)	\$ 26.1	\$ 1.3	\$ 10.6	\$ (18.2)	\$ (32.4)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 1,282.0	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,213.8	\$ 1,222.3	\$ 1,208.0	\$ 1,219.8	\$ 1,231.3	\$ 1,186.8	\$ 1,182.0	\$ 1,201.2	\$ 1,183.0	\$ 1,161.5	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,213.8
Net Cash Flow	(57.1)	36.6	(26.6)	(21.1)	8.5	(14.3)	11.8	11.5	(44.5)	(4.8)	19.2	(18.2)	(21.5)	26.1	1.3	10.6	(18.2)	(32.4)
Ending Balance	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,213.8	\$ 1,222.3	\$ 1,208.0	\$ 1,219.8	\$ 1,231.3	\$ 1,186.8	\$ 1,182.0	\$ 1,201.2	\$ 1,183.0	\$ 1,161.5	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,181.4	\$ 1,181.4
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ 0.4	\$ -	\$ -	\$ 3.9	\$ 10.7	\$ 9.0	\$ 9.0	\$ 9.0	\$ 17.3	\$ 19.1	\$ 19.9	\$ 20.1	\$ 93.3	\$ 17.3	\$ 17.5	\$ 17.5	\$ 17.5	\$ 17.5
Insurance Account	37.2	37.8	37.8	32.7	36.8	37.7	24.7	26.4	27.1	27.1	22.9	20.9	22.9	22.9	22.9	22.9	37.2	37.2
Other Restricted & Construction Accounts	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
Total Other Bank Accounts	\$ 93.8	\$ 94.1	\$ 94.1	\$ 92.9	\$ 103.8	\$ 103.0	\$ 90.0	\$ 91.7	\$ 100.7	\$ 102.5	\$ 99.1	\$ 99.3	\$ 172.5	\$ 96.5	\$ 96.7	\$ 111.0	\$ 111.0	\$ 111.0
MEMO: OPERATING BANK ACCOUNT DETAILS																		
T&D Front-End Transition Accounts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D Service Accounts	790.6	789.7	765.5	761.3	751.1	745.4	755.1	699.6	722.7	831.5	798.9	703.7	695.9	714.9	661.1	771.3	708.7	708.7
Other Operating Accounts	434.2	471.8	469.4	452.4	471.2	462.5	464.7	531.7	464.1	350.5	402.3	479.3	465.6	472.7	527.8	428.2	472.7	472.7
Ending Balance	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,213.8	\$ 1,222.3	\$ 1,208.0	\$ 1,219.8	\$ 1,231.3	\$ 1,186.8	\$ 1,182.0	\$ 1,201.2	\$ 1,183.0	\$ 1,161.5	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,181.4	\$ 1,181.4



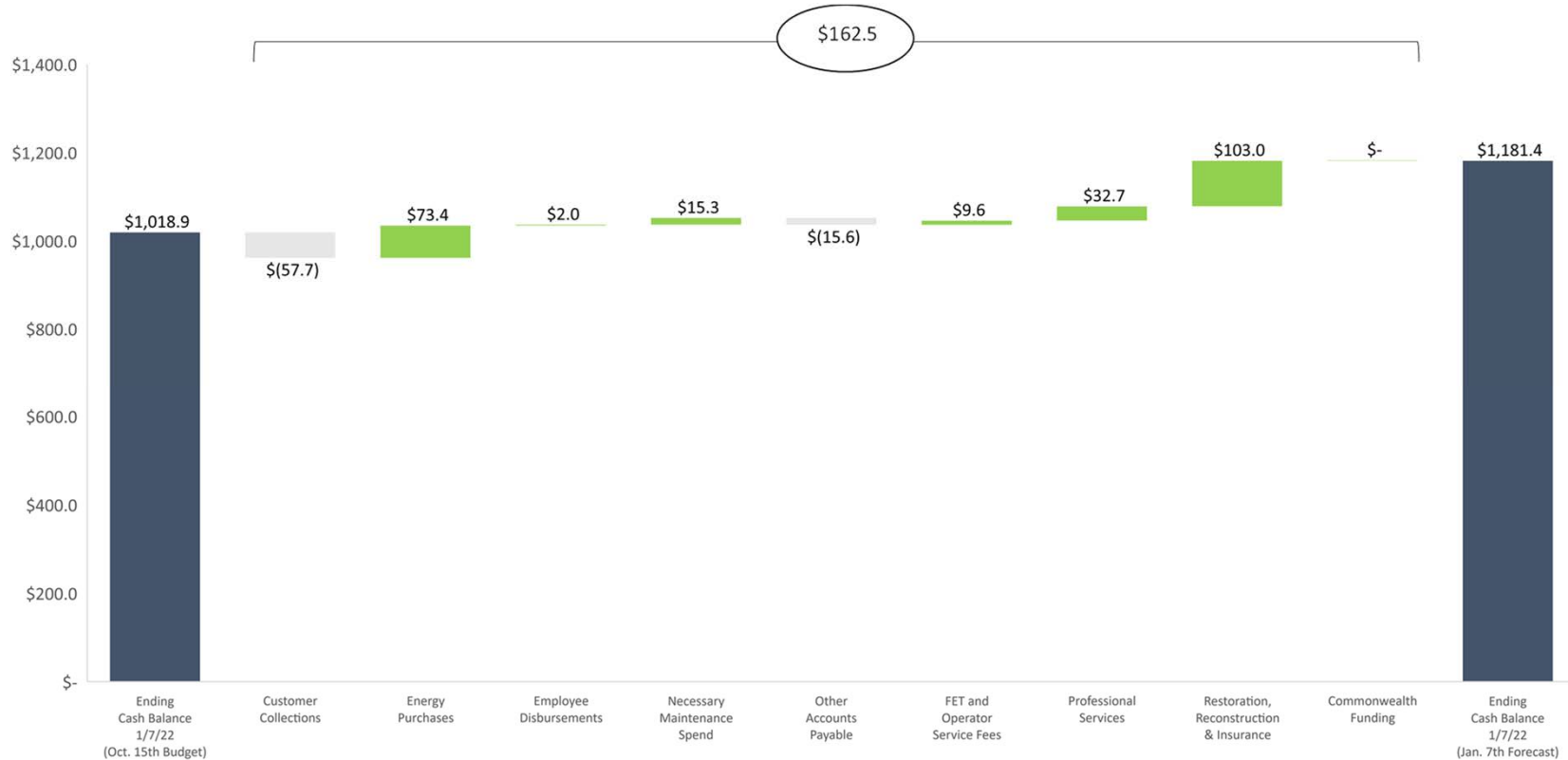
The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.

October 15th Budget

(\$ in millions) Week ending	Actual 09/17	Actual 09/24	Actual 10/01	Actual 10/08	1 10/15	2 10/22	3 10/29	4 11/05	5 11/12	6 11/19	7 11/26	8 12/03	9 12/10	10 12/17	11 12/24	12 12/31	13 01/07	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 69.2	\$ 78.9	\$ 68.4	\$ 61.3	\$ 59.9	\$ 72.4	\$ 79.4	\$ 70.2	\$ 70.2	\$ 70.2	\$ 80.7	\$ 67.2	\$ 65.3	\$ 65.3	\$ 75.8	\$ 65.3	\$ 68.9	\$ 910.8
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 69.2	\$ 78.9	\$ 68.4	\$ 61.3	\$ 59.9	\$ 72.4	\$ 79.4	\$ 70.2	\$ 70.2	\$ 70.2	\$ 80.7	\$ 67.2	\$ 65.3	\$ 65.3	\$ 75.8	\$ 65.3	\$ 68.9	\$ 910.8
ENERGY PURCHASES																		
Power purchase - AES	\$ (23.7)	\$ -	\$ -	\$ -	\$ -	\$ (23.3)	\$ -	\$ -	\$ -	\$ (25.2)	\$ -	\$ -	\$ -	\$ (24.5)	\$ -	\$ -	\$ -	\$ (73.0)
Power purchase - EcoElectrica	(16.8)	-	-	-	-	(15.3)	-	-	-	(14.8)	-	-	-	(15.0)	-	-	-	(45.1)
Power purchase - Renewable sources	(9.1)	(2.5)	(1.0)	-	(0.7)	(6.0)	-	-	-	(5.4)	-	-	-	(7.4)	-	-	-	(19.5)
Fuel purchase - Fleet and storage	(0.0)	(0.0)	(6.0)	(0.6)	-	(1.9)	-	-	-	(2.5)	-	-	-	(2.5)	-	-	-	(6.9)
Fuel purchase - Freeport	(11.4)	(17.0)	(11.4)	(11.2)	(5.6)	(10.9)	(10.4)	(11.1)	(14.2)	(17.1)	(17.7)	(12.1)	(41.8)	(12.6)	(13.2)	(19.8)	(36.4)	(223.0)
Fuel purchase - Puma	(6.9)	(10.1)	(5.7)	(11.7)	(7.3)	(16.3)	(23.6)	(14.2)	(8.4)	(7.2)	(14.0)	(4.6)	(11.8)	(7.2)	(7.2)	(6.9)	(13.6)	(142.5)
LNG purchase - Naturgy	-	-	-	(61.0)	-	-	-	(37.0)	-	-	-	-	(55.3)	-	-	-	(46.2)	(138.5)
LNG purchase - NFE	-	-	(26.4)	-	-	-	-	(24.4)	-	-	-	(29.4)	-	-	-	(28.9)	-	(82.7)
Total Energy Purchases	\$ (68.0)	\$ (29.6)	\$ (50.5)	\$ (84.5)	\$ (13.7)	\$ (73.7)	\$ (34.0)	\$ (86.8)	\$ (22.7)	\$ (72.2)	\$ (31.8)	\$ (46.2)	\$ (108.9)	\$ (69.2)	\$ (20.4)	\$ (55.6)	\$ (96.1)	\$ (731.2)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ (3.3)	\$ -	\$ (3.1)	\$ (0.9)	\$ (2.8)	\$ -	\$ (3.2)	\$ -	\$ (3.2)	\$ -	\$ (3.2)	\$ -	\$ (2.9)	\$ -	\$ (2.9)	\$ -	\$ (2.1)	\$ (20.4)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	(0.8)	-	-	-	-	-	(0.8)
Medical Benefits	(2.8)	-	-	-	(4.0)	-	-	(1.6)	-	-	-	(1.3)	-	-	-	(1.4)	-	(8.3)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	(1.0)	-	-	-	(1.0)
Other Benefits	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	(7.0)
Estimated Gross Overtime	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	(2.8)
GridCo Employee Disbursements	(7.5)	-	(9.9)	-	(9.0)	-	(9.9)	-	(8.3)	-	(11.8)	-	(8.5)	-	(8.5)	-	(10.9)	(66.9)
Total Employee Disbursements	\$ (15.1)	\$ -	\$ (14.4)	\$ (0.9)	\$ (17.2)	\$ -	\$ (14.5)	\$ (1.6)	\$ (12.9)	\$ -	\$ (16.4)	\$ (2.1)	\$ (12.9)	\$ (1.0)	\$ (12.9)	\$ (1.4)	\$ (14.4)	\$ (107.1)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ (0.3)	\$ (0.4)	\$ -	\$ (2.0)	\$ (4.2)	\$ (1.9)	\$ (1.9)	\$ (1.9)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (2.0)	\$ (1.9)	\$ (27.6)
Other Accounts Payable	2.0	(9.1)	(11.5)	4.2	(3.4)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(71.0)
FET and Operator Service Fees	(29.2)	-	(9.7)	-	-	-	-	(9.7)	-	-	(35.6)	(19.3)	-	-	-	-	(9.7)	(74.4)
Total Other Operating Disbursements	\$ (27.5)	\$ (9.6)	\$ (21.2)	\$ 2.2	\$ (7.6)	\$ (7.5)	\$ (7.5)	\$ (17.3)	\$ (7.6)	\$ (7.6)	\$ (43.2)	\$ (26.9)	\$ (7.6)	\$ (7.6)	\$ (7.6)	\$ (7.6)	\$ (17.2)	\$ (173.0)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (0.3)	\$ (3.4)	\$ (6.9)	\$ (3.4)	\$ (8.5)	\$ (4.1)	\$ (4.1)	\$ (4.4)	\$ (4.1)	\$ (4.1)	\$ (4.1)	\$ (4.1)	\$ (4.4)	\$ (4.1)	\$ (4.1)	\$ (4.1)	\$ (4.1)	\$ (58.6)
Legal Services	(0.0)	-	(0.9)	(0.5)	(0.1)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(5.4)
P3 Authority Transaction Costs	(0.8)	-	-	-	-	(0.8)	-	(1.2)	-	-	(0.4)	-	-	-	-	(0.4)	-	(2.8)
PREPA Restructuring & Title III	(1.7)	-	(0.6)	-	-	-	(0.1)	(1.3)	(0.7)	-	(0.2)	(0.5)	(0.5)	(0.5)	(0.4)	(0.5)	(0.3)	(5.1)
FOMB Advisor Costs allocated to PREPA	(13.0)	-	-	-	-	-	(2.4)	-	-	-	-	-	-	-	-	(2.5)	-	(7.4)
Total Professional Services	\$ (15.7)	\$ (3.4)	\$ (8.4)	\$ (4.0)	\$ (8.6)	\$ (5.4)	\$ (7.1)	\$ (7.3)	\$ (5.3)	\$ (4.6)	\$ (7.6)	\$ (5.1)	\$ (5.3)	\$ (5.1)	\$ (4.9)	\$ (8.0)	\$ (4.9)	\$ (79.2)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ -	\$ (0.0)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1.9)	\$ -	\$ (2.4)	\$ -	\$ -	\$ -	\$ (4.3)
FEMA Proceeds	-	0.4	-	-	0.3	-	-	-	-	-	1.0	2.0	12.9	4.2	-	-	-	20.4
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	5.0	-	11.2	-	-	-	-	-	-	-	-	-	-	-	11.2
Permanent Work	-	(0.2)	(0.4)	(0.4)	(0.6)	(2.8)	(2.8)	(2.8)	(3.5)	(3.5)	(3.8)	(3.8)	(3.9)	(3.9)	(3.9)	(3.9)	(3.2)	(42.5)
Total Restoration, Reconstruction & Insurance	\$ -	\$ 0.2	\$ (0.4)	\$ 4.7	\$ (0.3)	\$ 8.4	\$ (2.8)	\$ (2.8)	\$ (3.5)	\$ (3.5)	\$ (2.8)	\$ (3.7)	\$ 9.0	\$ (2.1)	\$ (3.9)	\$ (3.9)	\$ (3.2)	\$ (15.1)
COMMONWEALTH FUNDING																		
Commonwealth T&D Service Account Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Commonwealth Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET CASH FLOW	\$ (57.1)	\$ 36.6	\$ (26.6)	\$ (21.1)	\$ 12.5	\$ (5.8)	\$ 13.5	\$ (45.5)	\$ 18.2	\$ (17.7)	\$ (21.1)	\$ (16.9)	\$ (60.4)	\$ (19.7)	\$ 26.1	\$ (11.2)	\$ (67.0)	\$ (194.9)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 1,282.0	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,213.8	\$ 1,226.3	\$ 1,220.5	\$ 1,234.0	\$ 1,188.5	\$ 1,206.7	\$ 1,189.0	\$ 1,167.9	\$ 1,151.0	\$ 1,090.6	\$ 1,070.9	\$ 1,097.0	\$ 1,085.8	\$ 1,213.8
Net Cash Flow	(57.1)	36.6	(26.6)	(21.1)	12.5	(5.8)	13.5	(45.5)	18.2	(17.7)	(21.1)	(16.9)	(60.4)	(19.7)	26.1	(11.2)	(67.0)	(194.9)
Ending Balance	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,213.8	\$ 1,226.3	\$ 1,220.5	\$ 1,234.0	\$ 1,188.5	\$ 1,206.7	\$ 1,189.0	\$ 1,167.9	\$ 1,151.0	\$ 1,090.6	\$ 1,070.9	\$ 1,097.0	\$ 1,085.8	\$ 1,018.9	\$ 1,018.9
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ 0.4	\$ -	\$ -	\$ 3.9	\$ 10.7	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0	\$ 9.0
Insurance Account	37.2	37.8	37.8	32.7	32.7	21.5	21.5	21.5	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3
Other Restricted & Construction Accounts	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
Total Other Bank Accounts	\$ 93.8	\$ 94.1	\$ 94.1	\$ 92.9	\$ 99.7	\$ 86.8	\$ 86.8	\$ 86.8	\$ 109.6	\$ 109.6	\$ 109.6	\$ 109.6	\$ 109.6	\$ 109.6	\$ 109.6	\$ 109.6	\$ 109.6	\$ 109.6
MEMO: OPERATING BANK ACCOUNT DETAILS																		
T&D Front-End Transition Accounts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D Service Accounts	790.6	789.7	765.5	761.3														
Other Operating Accounts	434.2	471.8	469.4	452.4														
Ending Balance	\$ 1,224.8	\$ 1,261.5	\$ 1,234.9	\$ 1,213.8														



October 15th Budget With Actuals Through 1/7 vs October 15th Budget Cash Bridge as of January 7, 2022



- “Customer Collections” variance primarily due to timing of General Client and certain large Government receivables
- “Energy Purchases” variance primarily due to timing of fuel oil purchases, lower than forecasted LNG spend and fuel mix
- “Necessary Maintenance Spend” variance due to lower than forecasted spend to date
- “Other Accounts Payable” variance primarily due to timing of disbursements, insurance premium payments and check receipts and disbursements clearing PREPA’s operating accounts
- “FET and Operator Service Fees” variance due to timing of payments to Luma
- “Professional Services” variance primarily due to timing of payments for Title III and non-Title III related professional services
- “Restoration, Reconstruction & Insurance” variance primarily due to receipt of \$76 million of ARPA funds, timing of GridCo permanent work and higher than anticipated transfer of insurance proceeds partially offset by timing of FEMA proceeds





**Puerto Rico
Electric Power
Authority**

Puerto Rico Electric Power Authority

13-Week Cash Flow Update

March 16, 2022

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Puerto Rico
Electric Power
Authority

Table of Contents

- General Overview
- January 14th Budget updated for actuals through 3/11/22
- January 14th Budget (Based on fuel forecast as of February 8, 2022)
- January 14th Budget With Actuals Through 3/11 vs January 14th Budget Cash Bridge

General Overview

- The January 14th Budget With Actuals Through 3/11 vs January 14th Budget Cash Bridge captures the cumulative variance from 1/8/22 through 3/11/22
- Any timing related variances from actual weeks have not been re-timed into future periods for purposes of this analysis

The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.

January 14th Budget With Actuals Through 3/11

(\$ in millions) Week ending	Actual 12/17	Actual 12/24	Actual 12/31	Actual 01/07	Actual 01/14	Actual 01/21	Actual 01/28	Actual 02/04	Actual 02/11	Actual 02/18	Actual 02/25	Actual 03/04	Actual 03/11	1 03/18	2 03/25	3 04/01	4 04/08	13 Week TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 70.9	\$ 50.7	\$ 54.9	\$ 57.3	\$ 70.0	\$ 63.5	\$ 64.4	\$ 80.2	\$ 72.6	\$ 71.0	\$ 63.4	\$ 83.2	\$ 85.2	\$ 65.2	\$ 75.7	\$ 67.5	\$ 76.5	\$ 938.5
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 70.9	\$ 50.7	\$ 54.9	\$ 57.3	\$ 70.0	\$ 63.5	\$ 64.4	\$ 80.2	\$ 72.6	\$ 71.0	\$ 63.4	\$ 83.2	\$ 85.2	\$ 65.2	\$ 75.7	\$ 67.5	\$ 76.5	\$ 938.5
ENERGY PURCHASES																		
Power purchase - AES	\$ (25.1)	\$ -	\$ -	\$ -	\$ (24.2)	\$ -	\$ -	\$ -	\$ -	\$ (24.2)	\$ -	\$ -	\$ -	\$ (22.5)	\$ -	\$ -	\$ -	\$ (70.9)
Power purchase - EcoElectrica	(15.3)	-	-	-	(15.9)	-	-	-	-	(15.6)	-	-	-	(15.0)	-	-	-	(46.6)
Power purchase - Renewable sources	(5.1)	-	-	-	(5.1)	-	-	-	-	(5.6)	-	-	-	(6.8)	-	-	-	(17.5)
Fuel purchase - Fleet and storage	(0.1)	(0.0)	(0.0)	-	(0.7)	(0.0)	(4.3)	(0.1)	(0.1)	(0.5)	(0.1)	-	(0.0)	(0.6)	-	-	-	(6.4)
Fuel purchase - Bunker C	(12.7)	(19.1)	(23.7)	(14.7)	(26.5)	(30.0)	(57.6)	(28.7)	(19.4)	(46.8)	(16.1)	(49.5)	(34.8)	(47.2)	(13.6)	(44.3)	(6.5)	(421.1)
Fuel purchase - Diesel	(44.3)	(11.1)	(10.1)	(3.7)	(8.3)	(21.6)	(12.1)	(6.7)	(14.5)	(3.7)	(3.2)	(9.9)	(5.3)	(12.3)	-	(12.0)	(6.5)	(116.0)
LNG purchase - Naturgy	-	-	-	(30.8)	-	-	-	-	(41.7)	-	-	-	(31.2)	-	-	-	(36.5)	(109.4)
LNG purchase - NFE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Energy Purchases	\$ (102.5)	\$ (30.2)	\$ (33.8)	\$ (49.3)	\$ (80.8)	\$ (51.6)	\$ (74.0)	\$ (35.5)	\$ (75.7)	\$ (96.4)	\$ (19.5)	\$ (59.4)	\$ (71.3)	\$ (104.4)	\$ (13.6)	\$ (56.3)	\$ (49.5)	\$ (788.0)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ -	\$ (2.3)	\$ (0.0)	\$ (2.0)	\$ (0.0)	\$ (1.9)	\$ -	\$ (2.0)	\$ (0.0)	\$ (2.2)	\$ -	\$ (1.9)	\$ -	\$ (2.1)	\$ -	\$ (2.1)	\$ -	\$ (12.3)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Benefits	-	-	(1.7)	-	-	-	-	(0.8)	-	-	(1.2)	(0.6)	(0.1)	-	(1.3)	-	-	(4.0)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Benefits	-	(3.5)	(1.3)	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(5.1)	-	(1.0)	-	(10.1)
Estimated Gross Overtime	-	(0.4)	-	(0.3)	-	(0.2)	-	(0.3)	-	(0.3)	-	(0.3)	-	(0.4)	-	(0.4)	-	(1.9)
GridCo Employee Disbursements	-	(10.9)	-	(9.0)	(7.7)	(8.3)	(6.9)	-	(20.7)	-	(9.6)	-	(7.8)	(4.5)	(17.1)	(4.5)	(14.6)	(101.8)
Total Employee Disbursements	\$ -	\$ (17.2)	\$ (3.0)	\$ (12.3)	\$ (7.7)	\$ (11.5)	\$ (6.9)	\$ (4.1)	\$ (20.7)	\$ (3.5)	\$ (10.8)	\$ (3.9)	\$ (7.9)	\$ (12.0)	\$ (18.4)	\$ (8.0)	\$ (14.6)	\$ (130.1)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ -	\$ (0.4)	\$ -	\$ -	\$ -	\$ -	\$ (0.0)	\$ (2.4)	\$ (3.3)	\$ (2.0)	\$ (2.6)	\$ (3.7)	\$ (1.5)	\$ (4.0)	\$ -	\$ (4.0)	\$ -	\$ (23.5)
Other Accounts Payable	(7.9)	9.6	(4.4)	(13.8)	(4.8)	(11.7)	(6.9)	(11.8)	(4.8)	(9.8)	13.2	(15.4)	(9.8)	(4.3)	(4.3)	(4.3)	(4.3)	(79.2)
FET and Operator Service Fees	-	(9.7)	-	-	-	-	-	(9.7)	-	-	-	(9.7)	(7.3)	-	-	(9.7)	-	(36.5)
Total Other Operating Disbursements	\$ (7.9)	\$ (0.6)	\$ (4.4)	\$ (13.8)	\$ (4.8)	\$ (11.7)	\$ (7.0)	\$ (24.0)	\$ (8.1)	\$ (11.9)	\$ 10.6	\$ (28.8)	\$ (18.5)	\$ (8.3)	\$ (4.3)	\$ (18.1)	\$ (4.3)	\$ (139.2)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (9.3)	\$ (1.2)	\$ (0.6)	\$ -	\$ (3.1)	\$ (2.8)	\$ (0.7)	\$ (5.5)	\$ (3.9)	\$ (2.3)	\$ (1.7)	\$ (1.0)	\$ (1.9)	\$ (2.7)	\$ (5.9)	\$ (2.5)	\$ (5.9)	\$ (39.7)
Legal Services	(0.5)	-	(0.2)	-	-	(0.2)	(0.3)	(0.1)	(0.8)	(0.2)	-	(0.8)	(0.0)	(0.2)	(0.2)	(0.2)	(0.5)	(3.5)
P3 Authority Transaction Costs	-	-	-	-	-	(2.4)	-	-	-	-	-	-	-	-	-	(0.8)	-	(3.2)
PREPA Restructuring & Title III	-	-	(1.3)	-	-	-	-	(0.8)	-	(0.0)	(0.8)	(0.4)	-	(0.2)	(0.7)	(0.5)	(0.5)	(3.8)
FOMB Advisor Costs allocated to PREPA	-	-	-	-	-	-	-	-	-	-	-	-	(0.1)	-	-	(2.0)	-	(2.1)
Total Professional Services	\$ (9.8)	\$ (1.2)	\$ (2.2)	\$ -	\$ (3.1)	\$ (5.3)	\$ (1.0)	\$ (6.4)	\$ (4.7)	\$ (2.5)	\$ (2.4)	\$ (2.1)	\$ (2.0)	\$ (3.1)	\$ (6.8)	\$ (6.0)	\$ (6.9)	\$ (52.3)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (63.8)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (63.8)
FEMA Proceeds / Other Federal Funding	76.0	(0.2)	-	-	-	-	-	-	-	-	0.3	64.0	-	-	-	-	-	64.4
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	-	-	-	-	-	-	-	-	33.0	-	-	-	-	-	33.0
Permanent Work	(0.6)	-	(0.9)	-	(0.2)	(0.6)	(0.1)	(0.2)	(0.1)	(0.0)	-	(0.1)	-	(0.5)	(0.5)	(0.5)	(0.5)	(3.5)
Total Restoration, Reconstruction & Insurance	\$ 75.4	\$ (0.2)	\$ (0.9)	\$ -	\$ (0.2)	\$ (0.6)	\$ (0.1)	\$ (0.2)	\$ (0.1)	\$ (0.0)	\$ 0.3	\$ 33.0	\$ -	\$ (0.5)	\$ (0.5)	\$ (0.5)	\$ (0.5)	\$ 30.1
COMMONWEALTH FUNDING																		
Commonwealth T&D Service Account Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Commonwealth Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET CASH FLOW	\$ 26.1	\$ 1.3	\$ 10.6	\$ (18.2)	\$ (26.6)	\$ (17.0)	\$ (24.5)	\$ 9.9	\$ (36.7)	\$ (43.3)	\$ 41.6	\$ 22.0	\$ (14.6)	\$ (63.2)	\$ 32.0	\$ (21.4)	\$ 0.7	\$ (141.0)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 1,161.5	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,181.4	\$ 1,154.7	\$ 1,137.7	\$ 1,113.2	\$ 1,123.1	\$ 1,086.4	\$ 1,043.1	\$ 1,084.7	\$ 1,106.6	\$ 1,092.1	\$ 1,028.9	\$ 1,061.0	\$ 1,039.6	\$ 1,181.4
Net Cash Flow	26.1	1.3	10.6	(18.2)	(26.6)	(17.0)	(24.5)	9.9	(36.7)	(43.3)	41.6	22.0	(14.6)	(63.2)	32.0	(21.4)	0.7	(141.0)
Ending Balance	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,181.4	\$ 1,154.7	\$ 1,137.7	\$ 1,113.2	\$ 1,123.1	\$ 1,086.4	\$ 1,043.1	\$ 1,084.7	\$ 1,106.6	\$ 1,092.1	\$ 1,028.9	\$ 1,061.0	\$ 1,039.6	\$ 1,040.3	\$ 1,040.3
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ 17.3	\$ 17.5	\$ 17.5	\$ 17.5	\$ 85.6	\$ 85.8	\$ 85.8	\$ 87.3	\$ 86.1	\$ 126.6	\$ 126.2	\$ 70.0	\$ 70.0	\$ 70.0	\$ 70.0	\$ 70.0	\$ 70.0	\$ 70.0
Insurance Account	22.9	22.9	37.2	37.2	37.2	37.2	37.2	42.7	42.7	42.7	42.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
Other Restricted & Construction Accounts	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
Total Other Bank Accounts	\$ 96.5	\$ 96.7	\$ 111.0	\$ 111.0	\$ 179.1	\$ 179.3	\$ 179.3	\$ 186.8	\$ 185.7	\$ 226.1	\$ 225.7	\$ 136.5	\$ 136.5	\$ 136.5	\$ 136.5	\$ 136.5	\$ 136.5	\$ 136.5
MEMO: OPERATING BANK ACCOUNT DETAILS																		
T&D Front-End Transition Accounts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D Service Accounts	714.9	661.1	771.3	708.7	731.1	664.6	721.5	668.9	839.4	737.1	705.0	628.0	760.6					
Other Operating Accounts	472.7	527.8	428.2	472.7	423.7	473.1	391.7	454.2	247.0	306.0	379.6	478.6	331.5					
Ending Balance	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,181.4	\$ 1,154.7	\$ 1,137.7	\$ 1,113.2	\$ 1,123.1	\$ 1,086.4	\$ 1,043.1	\$ 1,084.7	\$ 1,106.6	\$ 1,092.1					



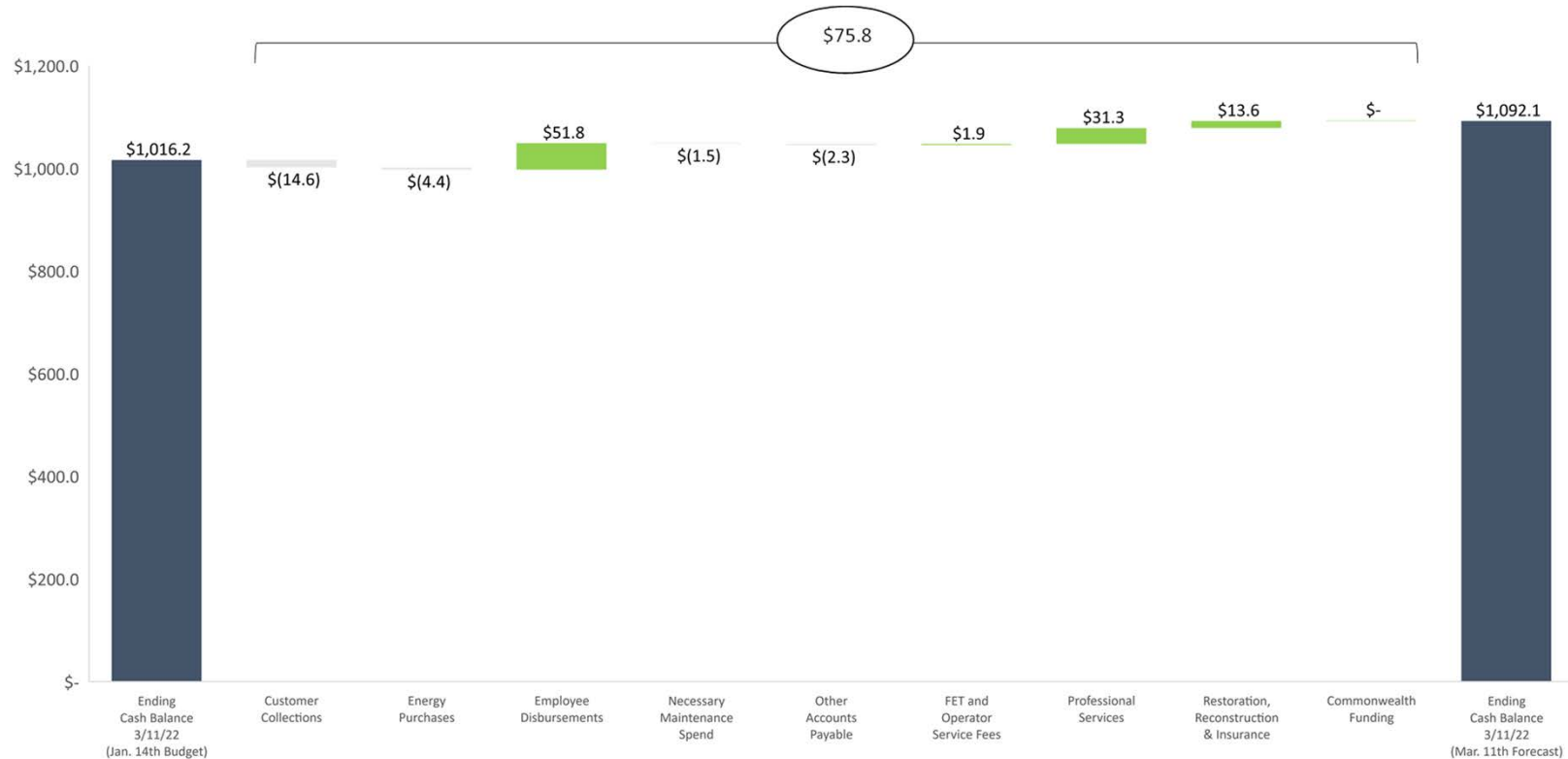
The projections presented herein utilize assumptions taking into account the COVID-19 impact to residential, commercial and industrial customers of PREPA to date. As the COVID-19 situation is ongoing, the impacts to date are not necessarily indicative of future impacts; and therefore, the cash flow budget remains subject to material change.

January 14th Budget

(\$ in millions)	Actual	Actual	Actual	Actual	1	2	3	4	5	6	7	8	9	10	11	12	13	13 Week
Week ending	12/17	12/24	12/31	01/07	01/14	01/21	01/28	02/04	02/11	02/18	02/25	03/04	03/11	03/18	03/25	04/01	04/08	TOTAL
OPERATING RECEIPTS																		
Customer Collections	\$ 70.9	\$ 50.7	\$ 54.9	\$ 57.3	\$ 70.3	\$ 70.3	\$ 70.3	\$ 82.3	\$ 77.2	\$ 77.2	\$ 77.2	\$ 78.1	\$ 65.2	\$ 65.2	\$ 75.7	\$ 67.5	\$ 76.5	\$ 953.1
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Receipts	\$ 70.9	\$ 50.7	\$ 54.9	\$ 57.3	\$ 70.3	\$ 70.3	\$ 70.3	\$ 82.3	\$ 77.2	\$ 77.2	\$ 77.2	\$ 78.1	\$ 65.2	\$ 65.2	\$ 75.7	\$ 67.5	\$ 76.5	\$ 953.1
ENERGY PURCHASES																		
Power purchase - AES	\$ (25.1)	\$ -	\$ -	\$ -	\$ (24.2)	\$ -	\$ -	\$ -	\$ -	\$ (24.0)	\$ -	\$ -	\$ -	\$ (22.5)	\$ -	\$ -	\$ -	\$ (70.7)
Power purchase - EcoElectrica	(15.3)	-	-	-	(15.9)	-	-	-	-	(15.3)	-	-	-	(15.0)	-	-	-	(46.3)
Power purchase - Renewable sources	(5.1)	-	-	-	(5.1)	-	(0.1)	-	-	(5.6)	-	-	-	(6.8)	-	-	-	(17.6)
Fuel purchase - Fleet and storage	(0.1)	(0.0)	(0.0)	-	(0.7)	(0.0)	(4.3)	(0.1)	-	-	(2.5)	-	-	(0.6)	-	-	-	(8.2)
Fuel purchase - Bunker C	(12.7)	(19.1)	(23.7)	(14.7)	(26.5)	(30.0)	(57.6)	(28.7)	(19.4)	(21.0)	(23.8)	(84.4)	(6.1)	(47.2)	(13.6)	(44.3)	(6.5)	(409.2)
Fuel purchase - Diesel	(44.3)	(11.1)	(10.1)	(3.7)	(8.3)	(21.6)	(12.1)	(6.7)	(17.7)	(6.6)	(8.1)	(4.0)	(5.9)	(12.3)	-	(12.0)	(6.5)	(121.7)
LNG purchase - Naturgy	-	-	-	(30.8)	-	-	-	-	(41.7)	-	-	-	(31.7)	-	-	-	(36.5)	(109.9)
LNG purchase - NFE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Energy Purchases	\$ (102.5)	\$ (30.2)	\$ (33.8)	\$ (49.3)	\$ (80.8)	\$ (51.6)	\$ (74.1)	\$ (35.5)	\$ (78.8)	\$ (72.4)	\$ (34.4)	\$ (88.3)	\$ (43.8)	\$ (104.4)	\$ (13.6)	\$ (56.3)	\$ (49.5)	\$ (783.6)
EMPLOYEE DISBURSEMENTS																		
Salaries and Wages	\$ -	\$ (2.3)	\$ (0.0)	\$ (2.0)	\$ -	\$ (1.9)	\$ -	\$ (2.1)	\$ -	\$ (2.1)	\$ -	\$ (2.1)	\$ -	\$ (2.1)	\$ -	\$ (2.1)	\$ -	(12.5)
Christmas Bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Benefits	-	-	(1.7)	-	-	-	(1.2)	-	-	-	(1.2)	-	-	-	(1.3)	-	-	(3.7)
Worker's Compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Benefits	-	(3.5)	(1.3)	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(1.0)	-	(5.1)	-	(1.0)	-	(10.1)
Estimated Gross Overtime	-	(0.4)	-	(0.3)	-	(0.2)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(0.4)	-	(2.1)
GridCo Employee Disbursements	-	(10.9)	-	(9.0)	(7.7)	(8.3)	(19.3)	(17.1)	(17.1)	(17.1)	(7.0)	(4.5)	(14.6)	(4.5)	(17.1)	(4.5)	(14.6)	(153.5)
Total Employee Disbursements	\$ -	\$ (17.2)	\$ (3.0)	\$ (12.3)	\$ (7.7)	\$ (11.5)	\$ (20.5)	\$ (20.6)	\$ (17.1)	\$ (20.6)	\$ (8.2)	\$ (8.0)	\$ (14.6)	\$ (12.0)	\$ (18.4)	\$ (8.0)	\$ (14.6)	\$ (181.9)
OTHER OPERATING DISBURSEMENTS																		
Necessary Maintenance Spend	\$ -	\$ (0.5)	\$ -	\$ -	\$ -	\$ -	(2.5)	(2.5)	\$ -	(4.5)	\$ -	(4.5)	\$ -	(4.0)	\$ -	(4.0)	\$ -	(22.0)
Other Accounts Payable	(7.9)	9.6	(4.4)	(13.8)	(3.2)	(10.2)	(15.6)	(6.5)	(5.0)	(4.8)	(5.1)	(4.8)	(4.3)	(4.3)	(4.3)	(4.3)	(4.3)	(76.9)
FET and Operator Service Fees	-	(9.7)	-	-	-	-	(9.2)	(9.7)	-	-	-	(9.7)	-	-	-	(9.7)	-	(38.4)
Total Other Operating Disbursements	\$ (7.9)	\$ (0.6)	\$ (4.4)	\$ (13.8)	\$ (3.2)	\$ (10.2)	\$ (27.3)	\$ (18.7)	\$ (5.0)	\$ (9.3)	\$ (5.1)	\$ (19.1)	\$ (4.3)	\$ (8.3)	\$ (4.3)	\$ (18.1)	\$ (4.3)	\$ (173.3)
PROFESSIONAL SERVICES																		
Professional & Technical Outsourced Services	\$ (9.3)	\$ (1.1)	\$ (0.6)	\$ -	\$ (2.1)	\$ (2.8)	(7.5)	(6.5)	(6.0)	(6.8)	(2.8)	(3.7)	(5.9)	(2.7)	(5.9)	(2.5)	(5.9)	(61.0)
Legal Services	(0.5)	-	(0.2)	-	-	(0.2)	(0.2)	(0.2)	(1.2)	(1.2)	(0.2)	(0.2)	(0.5)	(0.2)	(0.2)	(0.2)	(0.5)	(5.4)
P3 Authority Transaction Costs	-	-	-	-	-	(2.4)	-	-	-	-	-	-	(0.4)	-	-	-	-	(3.6)
PREPA Restructuring & Title III	-	-	(1.3)	-	-	-	(0.8)	(1.4)	(0.1)	-	(0.1)	(0.5)	(0.2)	(0.2)	(0.7)	(0.5)	(0.5)	(4.9)
FOMB Advisor Costs allocated to PREPA	-	-	-	-	-	-	-	(4.8)	-	-	-	(2.0)	-	-	(2.0)	-	-	(8.8)
Total Professional Services	\$ (9.8)	\$ (1.1)	\$ (2.2)	\$ -	\$ (2.1)	\$ (5.3)	\$ (8.6)	\$ (13.0)	\$ (7.3)	\$ (8.0)	\$ (3.1)	\$ (6.9)	\$ (6.6)	\$ (3.1)	\$ (6.8)	\$ (6.0)	\$ (6.9)	\$ (83.7)
RESTORATION, RECONSTRUCTION & INSURANCE																		
Restoration & Reconstruction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	(1.9)	\$ -	\$ -	\$ -	\$ -	\$ -	(1.9)
FEMA Proceeds / Other Federal Funding	76.0	(0.2)	-	-	-	-	0.3	7.6	-	1.6	-	15.2	-	-	-	-	-	24.7
Insured Repair Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permanent Work	(0.6)	-	(0.9)	-	(0.2)	(0.6)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(6.3)
Total Restoration, Reconstruction & Insurance	\$ 75.4	\$ (0.2)	\$ (0.9)	\$ -	\$ (0.2)	\$ (0.6)	\$ (0.2)	\$ 7.1	\$ (0.5)	\$ 1.1	\$ (0.5)	\$ 12.8	\$ (0.5)	\$ (0.5)	\$ (0.5)	\$ (0.5)	\$ (0.5)	\$ 16.5
COMMONWEALTH FUNDING																		
Commonwealth T&D Service Account Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Commonwealth Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET CASH FLOW	\$ 26.1	\$ 1.3	\$ 10.6	\$ (18.2)	\$ (23.7)	\$ (8.8)	\$ (60.4)	\$ 1.5	\$ (31.6)	\$ (32.1)	\$ 25.9	\$ (31.3)	\$ (4.6)	\$ (63.2)	\$ 32.0	\$ (21.4)	\$ 0.7	\$ (216.9)
OPERATING BANK ACCOUNTS																		
Beginning Balance	\$ 1,161.5	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,181.4	\$ 1,157.6	\$ 1,148.8	\$ 1,088.4	\$ 1,090.0	\$ 1,058.4	\$ 1,026.2	\$ 1,052.1	\$ 1,020.8	\$ 1,016.2	\$ 953.1	\$ 985.1	\$ 963.8	\$ 1,181.4
Net Cash Flow	26.1	1.3	10.6	(18.2)	(23.7)	(8.8)	(60.4)	1.5	(31.6)	(32.1)	25.9	(31.3)	(4.6)	(63.2)	32.0	(21.4)	0.7	(216.9)
Ending Balance	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,181.4	\$ 1,157.6	\$ 1,148.8	\$ 1,088.4	\$ 1,090.0	\$ 1,058.4	\$ 1,026.2	\$ 1,052.1	\$ 1,020.8	\$ 1,016.2	\$ 953.1	\$ 985.1	\$ 963.8	\$ 964.5	\$ 964.5
OTHER BANK ACCOUNTS																		
FEMA Emergency Accounts	\$ 17.3	\$ 17.5	\$ 17.5	\$ 17.5	\$ 85.6	\$ 85.8	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5	\$ 85.5
Insurance Account	22.9	22.9	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2
Other Restricted & Construction Accounts	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
Total Other Bank Accounts	\$ 96.5	\$ 96.7	\$ 111.0	\$ 111.0	\$ 179.1	\$ 179.3	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0	\$ 179.0
MEMO: OPERATING BANK ACCOUNT DETAILS																		
T&D Front-End Transition Accounts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D Service Accounts	714.9	661.1	771.3	708.7	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2
Other Operating Accounts	472.7	527.8	428.2	472.7	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
Ending Balance	\$ 1,187.6	\$ 1,188.9	\$ 1,199.5	\$ 1,181.4	\$ 1,157.6	\$ 1,148.8	\$ 1,088.4	\$ 1,090.0	\$ 1,058.4	\$ 1,026.2	\$ 1,052.1	\$ 1,020.8	\$ 1,016.2	\$ 953.1	\$ 985.1	\$ 963.8	\$ 964.5	\$ 964.5



January 14th Budget With Actuals Through 3/4 vs January 14th Budget Cash Bridge as of March 4, 2022



- “Customer Collections” variance primarily due to timing of General Client and Government receivables
- “Energy Purchases” variance primarily due to timing of Bunker C and Diesel payments and higher fuel costs
- “Employee Disbursements” variance primarily due to timing of GridCo payroll and catch-up for passthrough costs
- “Professional Services” variance primarily due to timing of catch-up payments for GridCo third-party passthrough costs and other Title-III and non-Title-III related professional services
- “Restoration, Reconstruction & Insurance” variance primarily due to the transfer of Hurricane Maria related insurance funds not included in the cash flow budget partially offset by lower than forecasted FEMA proceeds related to management cost reimbursements



GOBIERNO DE PUERTO RICO

AUTORIDAD DE ENERGÍA ELÉCTRICA

B. Petición: Información adicional, detallada, clara y específica sobre lo relacionado al incumplimiento de NFE con el contrato, aun si están sujetas a cambio.

Respuesta: Las comunicaciones enviadas por la AEE a NFE se incluyen a continuación. Además, se incluyen en la respuesta a la Petición E las hojas de asistencia a reuniones a las cuales NFE ha comparecido y se ha discutido el asunto de la interrupción de suministro de gas a la Central San Juan. En este momento la Autoridad continúa evaluando las estrategias legales y económicas a seguir para continuar la reclamación extrajudicial que ha incoado contra NFE por la interrupción de suministro de gas. Dicha reclamación está en curso, por lo cual revelar públicamente detalles ulteriores sobre estrategias para atender la misma sería en detrimento de posibles negociaciones o acciones legales. Las cuantías que se están utilizando como parte de la evaluación de la reclamación han sido presentadas al Negociado de Energía (*i.e.* Exhibit A, Moción en Cumplimiento de Orden Notificada el 16 de Marzo de 2022 (Mar. 18, 2022)). La Autoridad enfatiza que las cuantías y los cálculos presentados son preliminares, están sujetos a cambios y también están aún bajo el proceso deliberativo de la Autoridad. Con la presentación de estos cálculos la Autoridad **no** está confirmando que esta cuantía es o podría ser la cuantía que la Autoridad, de así determinarlo, intentará recuperar de NFE.





GOVERNMENT OF PUERTO RICO
PUERTO RICO ELECTRIC POWER AUTHORITY

Executive Director | Josué A. Colón Ortiz | director_ejecutivo@prepa.com

October 13, 2021

BY ELECTRONIC MAIL

NFEnergía LLC
c/o New Fortress Energy
111 W. 19th St., 8th Fl.
New York, NY 10011
Attention: General Counsel
legal@newfortressenergy.com

Ladies and Gentlemen:

**RE.: Breach of Fuel Sale and Purchase Agreement between NFEnergía, LLC as Seller and Puerto Rico Electric Power Authority as Buyer, dated as of March 5, 2019 (the "FSPA")
Notice Documenting Seller's Shutdown Notice**

We make reference to an e-mail received by engineer Ferdinand Correa from Winnie Irizarry, on September 20, 2021, regarding the notification of the Planned Seller Shutdown for its terminal's maintenance, to be performed from October 15 to 30, 2021.

Section 8.2 of Article VII of the Fuel Sale and Purchase Agreement (FSPA) states:

"Seller shall provide written notice to Buyer six (6) months prior to the dates during the next year when the MFH Facility will shut down for maintenance or refurbishment (each a '**Planned Seller Shutdown**')."

Since the above mentioned such notice does not comply with the terms and conditions of the FSPA, New Fortress shall be liable for PREPA's fuel purchase expenses required to keep the units in operation during the maintenance work period and in accordance to the remedy provided by Section 9.1 of the FSPA.

Please let me know if you have any questions concerning this letter. I look forward to receiving Seller's reply regarding this matter no later than this evening.

Cordially,

Josué A. Colón Ortiz
Executive Director

c Brannen McElmurray
Vinson & Elkins LLP
1001 Fannin St., Suite 2500
Houston, TX 77002
Attention: Mark Brasher
mbrasher@velaw.com
(bmcelmurray@newfortressenergy.com)





GOVERNMENT OF PUERTO RICO
PUERTO RICO ELECTRIC POWER AUTHORITY

Executive Director | Josué A. Colón Ortiz | director_ejecutivo@prepa.com


November 18, 2021

BY ELECTRONIC MAIL

NFEnergía LLC
c/o New Fortress Energy
111 W. 19th St., 8th Fl.
New York, NY 10011
Attention: General Counsel
legal@newfortressenergy.com

Mr. Chris Guinta
Chief Financial Officer
NFEnergía LLC
c/o New Fortress Energy
111 W. 19th St., 8th Fl.
New York, NY 10011
cguinta@newfortressenergy.com

Dear Sirs:

 **RE: Breach of Fuel Sale and Purchase Agreement between NFEnergía LLC as Seller and Puerto Rico Electric Power Authority as Buyer, dated as of March 5, 2019 (the "FSPA") – Seller's Shortfall**

At PREPA, we are both surprised and bewildered by the recent course of action chosen by NFEnergía, LLC (NFE) management regarding the supply of LNG for PREPA's Units 5 and 6 of our San Juan Power Plant. Up to this date, PREPA has been more than patient and lenient regarding NFE's actions and omissions which clearly constitute a breach of the Terms and Conditions of the FSPA¹ (although we have not waived our right to submit any claims under the FSPA). Nevertheless, we understand that this time, NFE has gone over the limit.

¹ For example, invading PREPA's right of way with the construction of NFE's facilities, delaying of substantial completion and the effect this had on the Fuel Price (PREPA should already be paying \$7.50 per MMBtu instead of \$8.50)



NFEnergía, LLC
Mr. Chris Guinta
Breach of Fuel Sale and Purchase Agreement
NFEnergía LLC as Seller and PREPA as Buyer
Page 2

We make reference to an agreement dating back to 2019, through which NFE acknowledged in several meeting minutes that, as part of its responsibilities after the execution of the FSPA, it was to relocate the fuel flange, valve and lines for the unloading of bunker C and diesel up to Pier C. To this date, the relocation of the diesel line has not taken place. Since last year, PREPA personnel has been requesting that these works be concluded. In **February** of this year, PREPA again requested in writing that the relocation be concluded by **September 1, 2021**. It was explained to NFE's management, through Engineer Winnie Irizarry, that PREPA's diesel supply contract would expire during the 3rd Quarter of 2021 and PREPA would not be able to receive diesel at any of the three piers at the Terminal. Still, no action was taken by NFE.

Later during the year, during weekly meetings and in emails, PREPA continued its request that the relocation be carried out immediately. When NFE notified PREPA, in September, regarding the maintenance to be performed from October 15-30, 2021 on NFE's facilities, PREPA suggested that relocation be completed at the same time, thus avoiding additional outages.

No one from NFE's side warned, mentioned nor suggested that the line relocation would prevent NFE from providing LNG to PREPA after the conclusion of the maintenance outage, on October 30, 2021. To add insult to injury, **35 days after the beginning of the maintenance outage**, NFE has not moved an inch towards commencement of the line relocation works. Since no work has been done in the Terminal since November 1st until today (18 days), there is no valid reason for NFE not to supply the LNG to PREPA. Therefore, NFE has not complied with its contractual obligation to supply LNG to PREPA. Furthermore, in callous disregard of its contractual obligations, NFE has announced that no LNG will be available until the conclusion of the works (December 18), when evidently, **only a short period of the work schedule comprises work requiring the Terminal to shut down**.


Section 8.2 of Article VII of FSPA states:

"Seller shall provide written notice to Buyer six (6) months prior to the dates during the next year when the MFH Facility will shut down for maintenance or refurbishment (each a '**Planned Seller Shutdown**')."

Since the above mentioned occurrence does not comply with the six (6) months prior notice of the FSPA, New Fortress shall be liable for the fuel purchase expenses required to keep the units in operation during the maintenance work period, in accordance to the remedy provided by Section 9.1 of the FSPA.

Section 9.1 of Article IX states:

"If, for any reason other than the occurrence of (a) an event of Force Majeure, (b) a Planned Seller Shutdown, (c) Excess Nominations, (d) the failure of any Firm Supply Solvency Condition to be satisfied at any time (subject to Clause 7.7) or (e) reasons attributable to Buyer (including any Unplanned Shutdowns affecting the SJ 5&6 Units, any Scheduled Maintenance affecting SJ 5&6 Units or any suspension pursuant to Clause 13.9(b)), Seller fails to deliver to Buyer the scheduled quantity of Natural Gas in the Binding Monthly Schedule for the applicable month of any Contract Quarter (the "Natural Gas Deficiency"), then, as Buyer's sole and exclusive remedy, and Seller's sole and exclusive liability, with respect to such Natural Gas Deficiency (subject only to Buyer's termination right pursuant to Clause 19.1(b)(ii)(B)):

- 
- (a) At Seller's sole option, Seller shall either (i) make available to Buyer, at the SJ 5&6 Units, the equivalent quantity of diesel (the "Back-up Fuel Quantity") required to make up for the energy content of the Natural Gas Deficiency, as calculated in accordance with Exhibit G or (ii) pay the Back-up Fuel Cover Amount so that Buyer may procure the Back-up Fuel Quantity from Third Parties.
 - (b) In case of Clause 9.1(a)(ii), if on the date of purchase of such Back-up Fuel Quantity by Buyer, the Back -Up Fuel Quantity Index Price exceeds the Fuel Price that would have been payable hereunder for an equivalent quantity of Natural Gas (based on energy content), Seller shall reimburse Buyer for the lower of (i) such difference multiplied by the Back-up Fuel Quantity Index Price applicable if Seller had delivered Natural Gas and (ii) the actual incremental cost to Buyer of sourcing and delivering the Back-up Fuel Quantity, relative to the Fuel Price that would have been paid to Seller for equivalent Natural Gas (the "Back-up Fuel Cover Amount").

9.2 Any Back -Up Fuel Cover Amounts shall be due and payable by Seller to Buyer in accordance with Article XIII.

9.3 Seller agrees that Buyer's damages associated with Seller's failure to deliver NG hereunder would be difficult to estimate, and that Clause 9.1 represents a reasonable estimate of such damages."

NFEnergía, LLC
Mr. Chris Guinta
Breach of Fuel Sale and Purchase Agreement
NFEnergía LLC as Seller and PREPA as Buyer
Page 4

PREPA will hold NFE responsible not only for the difference in fuel price, but also, for the loss of the warranty of the units' catalytic, as well as for the extra cost incurred by PREPA to have its new diesel supplier unload fuel at the Cataño Oil Dock until the diesel line relocation is completed. Moreover, NFE will be liable for any environmental penalty imposed on PREPA for exceeding limits while burning other fuels.

I truly believe we should move towards to solving this issue promptly for the sake of the Parties' business relationship and for the benefit of our customers.

Cordially,



Josué A. Colón Ortiz
Executive Director

c Mark Brasher
Vinson & Elkins LLP
1001 Fannin St., Suite 2500
Houston, TX 77002
mbrasher@velaw.com



GOBIERNO DE PUERTO RICO

AUTORIDAD DE ENERGÍA ELÉCTRICA

C. Petición: Proveer la fecha exacta de febrero 2022 en que se comenzó a suplir el gas natural a Central San Juan por NFE.

Respuesta: NFE comenzó a suplir gas natural a la Central San Juan el 19 de febrero de 2022. El gas se utilizó en la Unidad 6.





GOBIERNO DE PUERTO RICO

AUTORIDAD DE ENERGÍA ELÉCTRICA

D. Petición: Hojas de asistencia de reunión donde acordaron terminar los trabajos [de la línea de diésel que está reubicando NFE] a mediados de Abril 2022.

Respuesta: NFE confirmó a la AEE que los trabajos en la línea de diésel culminarían el 15 de abril de 2022 durante una reunión virtual que se celebrara el pasado 24 de febrero de 2022. En el día de ayer NFE confirmó nuevamente de manera verbal que terminarían los trabajos de reubicación de la línea de diésel el 15 de abril de 2022. La Autoridad le solicitó a NFE que confirme dicha fecha por escrito y NFE indicó que enviarán la comunicación esta semana.





GOBIERNO DE PUERTO RICO

AUTORIDAD DE ENERGÍA ELÉCTRICA


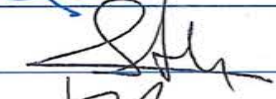



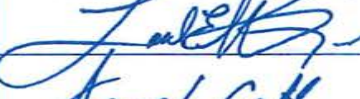


E. Nominaciones que se hicieran a Naturgy y NFE desde junio de 2021 cuando Luma comenzó las operaciones, récord de comunicaciones y cualquier comunicación con las compañías.

Respuesta: Ver Anejo.





GOBIERNO DE PUERTO RICO
AUTORIDAD DE ENERGÍA ELÉCTRICA

Reunión NATURGY			
26 de enero de 2022	Hora: 4:00 p.m.	Oficina: NEOS 801	
Nombre	Firma	Número de Teléfono	Correo Electrónico
Josué A. Colón Ortiz		787-521-4671	josue.colon@prepa.com
ESTHER NAVARRO		+3465549833	enavarr@naturgy.com
INÉS DÍEZ		+34650374814	idiex@naturgy.com
JOSUW MENCHOT		787 455 0038	jmenchot@naturgy.com
Edwin Barba		787-521-4905	edwin.barba@prepa.com
LIONEL SANTA		787-521-4912	Lionel.Santa@prepa.com
Jorge L. Cotto		939-575-0674	jorge.cotto@prepa.com
Mary C. Zapata Acosta		787-521-1351	mary.zapata@prepa.com

[illegible]

Oficina: NEOS 801

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~~Firma~~

Número de Teléfono

Correo Electrónico

Josué A. Colón Ortiz

787-521-4671

josue.colon@prepa.com

Jarvis A. Lopez Diaz

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+34606 40 4 728

generales @natunfy.com

JOAQUIN MEULLOT

787 455 0038

~~Joerg~~ Jmehniot@nordrgy.ch

Love Maria Echevarria

+34 660 4269 23

jmechevarria@natvgy.com

Mary C. Zapata Acosta

787-521-1351

mary.zapata@prepa.com

COMMONWEALTH OF PUERTO RICO
LUMA ENERGY SERVCO, LLC



AMENDED AND RESTATED NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN
PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND
NATURGY APROVISIONAMIENTOS S.A. (SELLER)

ANNUAL CONTRACT QUANTITY (ACQ)
Contract Year 2022
[Clause 7.1 (a)(i)]*

	Q1 (TBtu)	Q2 (TBtu)	Q3 (TBtu)	Q4 (TBtu)	ACQ (TBtu)
Jan-22					68.955
Feb-22					
Mar-22					
Apr-22					
May-22					
Jun-22					
Jul-22					
Aug-22					
Sep-22					
Oct-22					
Nov-22					
Dec-22					

Unit Outages

CS 5	12-Nov-22	4-Mar-23	Major & Environmental Maintenance
CS 6	22-Aug-21	5-Jan-22	Turbine Replacement
ECO CT1	8-Oct-22	11-Oct-22	BOP & NG Terminal Inspection
ECO CT2	8-Oct-22	7-Nov-22	Major Inspection
ECO STG	8-Oct-22	11-Oct-22	BOP & NG Terminal Inspection

* - The information attached has been requested and for the exclusive use of PREPA. The information is intended to be used by PREPA for various purposes including assisting in their preparation of their nominations of fuel usage. The forecasted generation relied upon assumptions for Capacity Limitations, and Generation Outage Schedules provided by PREPA. LUMA Energy does not assume any responsibility for the Fuel Nominations that PREPA will prepare with this information, and any adjustments to be made to this information will be result from criteria and analysis performed by PREPA.

COMMONWEALTH OF PUERTO RICO
LUMA ENERGY



AMENDED AND RESTATED NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN
PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND
NATURGY APROVISIONAMIENTOS S.A. (SELLER)

ANNUAL DELIVERY PROGRAMME (ADP)

Contract Year 2022

[Clause 7.1 (a)(ii)]*

	Q1 (TBtu)	Q2 (TBtu)	Q3 (TBtu)	Q4 (TBtu)	ACQ (TBtu)
Jan-22	17.195				68.955
Feb-22					
Mar-22					
Apr-22		18.606			
May-22					
Jun-22					
Jul-22			18.882		
Aug-22					
Sep-22					
Oct-22				14.273	
Nov-22					
Dec-22					

Unit Outages

CS 5	12-Nov-22	4-Mar-23	Major & Environmental Maintenance
CS 6	22-Aug-21	5-Jan-22	Turbine Replacement
ECO CT1	8-Oct-22	11-Oct-22	BOP & NG Terminal Inspection
ECO CT2	8-Oct-22	7-Nov-22	Major Inspection
ECO STG	8-Oct-22	11-Oct-22	BOP & NG Terminal Inspection

* - The information attached has been requested and for the exclusive use of PREPA. The information is intended to be used by PREPA for various purposes including assisting in their preparation of their nominations of fuel usage. The forecasted generation relied upon assumptions for Capacity Limitations, and Generation Outage Schedules provided by PREPA. LUMA Energy does not assume any responsibility for the Fuel Nominations that PREPA will prepare with this information, and any adjustments to be made to this information will be result from criteria and analysis performed by PREPA.

LUMA ENERGY SERVCO, LLC
SYSTEM OPERATIONS



AMENDED AND RESTATED
NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NATURGY APROVISIONAMIENTOS S.A. (SELLER)

COSTA SUR NINETY DAY PROGRAMME [Clause 7.1 (a)(iii)]

Month M	Jan-22	
DAY	DAILY MMscf	MMBtu
Saturday, January 01, 2022	60.14	62541
Sunday, January 02, 2022	62.61	65119
Monday, January 03, 2022	59.44	61819
Tuesday, January 04, 2022	59.44	61819
Wednesday, January 05, 2022	63.08	65605
Thursday, January 06, 2022	62.18	64671
Friday, January 07, 2022	63.09	65614
Saturday, January 08, 2022	63.08	65605
Sunday, January 09, 2022	63.08	65605
Monday, January 10, 2022	63.08	65605
Tuesday, January 11, 2022	63.38	65915
Wednesday, January 12, 2022	63.22	65744
Thursday, January 13, 2022	63.70	66244
Friday, January 14, 2022	63.36	65892
Saturday, January 15, 2022	127.36	132456
Sunday, January 16, 2022	128.29	133422
Monday, January 17, 2022	126.92	131996
Tuesday, January 18, 2022	131.54	136801
Wednesday, January 19, 2022	132.32	137608
Thursday, January 20, 2022	130.41	135631
Friday, January 21, 2022	130.56	135778
Saturday, January 22, 2022	132.89	138204
Sunday, January 23, 2022	128.40	133532
Monday, January 24, 2022	128.04	133162
Tuesday, January 25, 2022	131.78	137054
Wednesday, January 26, 2022	131.57	136830
Thursday, January 27, 2022	129.89	135081
Friday, January 28, 2022	130.93	136162
Saturday, January 29, 2022	128.95	134111
Sunday, January 30, 2022	66.55	69208
Monday, January 31, 2022	65.04	67645

2954.31 3.072 TBTu

Month M + 1 Feb-22

2.103 TBTu

Month M + 2 Mar-22

3.962 TBTu

LUMA ENERGY SERVCO, LLC
SYSTEM OPERATIONS



AMENDED AND RESTATED
NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NATURGY APROVISIONAMIENTOS S.A. (SELLER)

ECOELECTRICA NINETY DAY PROGRAMME [Clause 7.1 (a)(iii)]

Month M	Jan-22	
DAY	DAILY MMscf	MMBtu
Saturday, January 01, 2022	55.86	58097
Sunday, January 02, 2022	56.97	59248
Monday, January 03, 2022	57.87	60182
Tuesday, January 04, 2022	57.87	60182
Wednesday, January 05, 2022	63.69	66242
Thursday, January 06, 2022	58.23	60556
Friday, January 07, 2022	65.74	68372
Saturday, January 08, 2022	67.58	70283
Sunday, January 09, 2022	62.27	64763
Monday, January 10, 2022	61.76	64233
Tuesday, January 11, 2022	73.29	76222
Wednesday, January 12, 2022	71.88	74759
Thursday, January 13, 2022	75.97	79011
Friday, January 14, 2022	76.86	79936
Saturday, January 15, 2022	66.79	69457
Sunday, January 16, 2022	70.11	72919
Monday, January 17, 2022	63.54	66083
Tuesday, January 18, 2022	75.18	78191
Wednesday, January 19, 2022	81.21	84462
Thursday, January 20, 2022	80.01	83212
Friday, January 21, 2022	75.34	78352
Saturday, January 22, 2022	86.44	89901
Sunday, January 23, 2022	85.69	89118
Monday, January 24, 2022	83.23	86561
Tuesday, January 25, 2022	86.15	89591
Wednesday, January 26, 2022	86.01	89448
Thursday, January 27, 2022	85.22	88630
Friday, January 28, 2022	87.11	90593
Saturday, January 29, 2022	76.91	79991
Sunday, January 30, 2022	85.84	89278
Monday, January 31, 2022	81.06	84300
	2261.71	2,352 TBtu
Month M + 1	Feb-22	
	2,291	TBtu
Month M + 2	Mar-22	
	1,826	TBtu

Edwin Barbosa Viera

From: Martin Gomez, Daniel <dmarting@naturgy.com>
Sent: Monday, December 27, 2021 2:45 PM
To: Edwin Barbosa Viera; Manuel Rios Ramirez; Jorge Cotto Perez; FERDINAND CORREA MENDEZ; Hugal R. Rios Diaz; Angel A. Perez Carrasquillo; Mary C Zapata Acosta; JANET C. REY LABORDE; Salvador Serrano-Menendez; Raphael Gignac; Gary F Soto-Fernandez
Cc: Navarro Morente, Esther; Echevarria Munilla, Jose Maria; Rodriguez Martinez, Nuria; Meugniot Camacho, Jose Joaquín Amador; Figuerola Lopez, Rodrigo; Figueroa Velez, Yaritza
Subject: RE: Naturgy Aprovevisionamientos: Ninety Day Schedule
Importance: High

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Estimados,

Muchas gracias por enviar el NDS de Costa Sur y EcoElectrica para los meses de Enero a Marzo 2022. Sin embargo, en esta ocasión Naturgy Aprovevisionamientos no podrá cumplir con esas previsiones de consumo propuestas por PREPA en enero debido a los problemas que Naturgy Aprovevisionamientos S.A. viene sufriendo en los últimos meses con su suministrador de Trinidad y Tobago, y a la limitación existente en el tanque de GNL de Ecoeléctrica, que como explicamos impide que se descargue un buque completo, lo que incrementa la dificultad operativa del suministro.

Por lo tanto, rogamos ajusten sus previsiones diarias de consumo en base al siguiente escenario con el objeto de asegurar el suministro continuado y garantizar la seguridad del tanque de Ecoeléctrica:

- Del 28dic 2021 al 10ene 2022: Consumo conjunto Costa Sur y EcoElectrica en los niveles actuales de aprox. de 124.9 Mscf/d (130,000 MMBtu/día) hasta la entrega del cargamento previsto entre el 8 y el 9 de Enero.
- Del 11ene 2022 al 31ene 2022: Consumo conjunto Costa Sur y EcoElectrica de aprox. de 92.6 Mscf/d (96,300 MMBtu/día).

Les agradecemos su colaboración y entendimiento.

Un saludo,

Daniel Martin

From: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>
Sent: Friday, December 17, 2021 12:52 PM
To: Meugniot Camacho, Jose Joaquín Amador
Cc: Edwin Barbosa Viera; Manuel Rios Ramirez
Subject: FW: Naturgy Aprovevisionamientos: Ninety Day Schedule

LUMA ENERGY SERVCO, LLC
SYSTEM OPERATIONS



AMENDED AND RESTATED
NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NATURGY APROVISIONAMIENTOS S.A. (SELLER)

COSTA SUR NINETY DAY PROGRAMME [Clause 7.1 (a)(iii)]

Month M	Feb-22	
DAY	DAILY MMscf	MMBtu
Tuesday, February 01, 2022	115.03	119631
Wednesday, February 02, 2022	115.03	119631
Thursday, February 03, 2022	115.03	119631
Friday, February 04, 2022	115.03	119631
Saturday, February 05, 2022	115.03	119631
Sunday, February 06, 2022	115.03	119631
Monday, February 07, 2022	115.03	119631
Tuesday, February 08, 2022	115.03	119631
Wednesday, February 09, 2022	115.03	119631
Thursday, February 10, 2022	115.03	119631
Friday, February 11, 2022	115.03	119631
Saturday, February 12, 2022	126.04	131085
Sunday, February 13, 2022	125.85	130881
Monday, February 14, 2022	127.47	132572
Tuesday, February 15, 2022	127.77	132877
Wednesday, February 16, 2022	126.66	131728
Thursday, February 17, 2022	127.43	132524
Friday, February 18, 2022	126.70	131767
Saturday, February 19, 2022	126.04	131085
Sunday, February 20, 2022	126.04	131085
Monday, February 21, 2022	127.25	132338
Tuesday, February 22, 2022	128.19	133320
Wednesday, February 23, 2022	127.66	132762
Thursday, February 24, 2022	128.01	133126
Friday, February 25, 2022	127.08	132163
Saturday, February 26, 2022	126.04	131085
Sunday, February 27, 2022	125.93	130968
Monday, February 28, 2022	126.14	131181
	3421.62	3.558 TBTu
Month M + 1	Mar-22	
	4.076	TBTu
Month M + 2	Apr-22	
	3.944	TBTu

LUMA ENERGY SERVCO, LLC
SYSTEM OPERATIONS



AMENDED AND RESTATED
NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NATURGY APROVISIONAMIENTOS S.A. (SELLER)

ECOELECTRICA NINETY DAY PROGRAMME [Clause 7.1 (a)(iii)]

Month M	Feb-22	
DAY	DAILY MMscf	MMBtu
Tuesday, February 01, 2022	74.67	77657
Wednesday, February 02, 2022	74.83	77820
Thursday, February 03, 2022	77.97	81088
Friday, February 04, 2022	77.97	81088
Saturday, February 05, 2022	64.92	67519
Sunday, February 06, 2022	63.94	66496
Monday, February 07, 2022	73.98	76935
Tuesday, February 08, 2022	74.88	77879
Wednesday, February 09, 2022	72.90	75811
Thursday, February 10, 2022	72.96	75880
Friday, February 11, 2022	67.55	70253
Saturday, February 12, 2022	61.02	63457
Sunday, February 13, 2022	58.64	60989
Monday, February 14, 2022	70.32	73129
Tuesday, February 15, 2022	70.86	73697
Wednesday, February 16, 2022	70.82	73652
Thursday, February 17, 2022	73.63	76578
Friday, February 18, 2022	70.49	73306
Saturday, February 19, 2022	61.71	64175
Sunday, February 20, 2022	61.46	63922
Monday, February 21, 2022	65.20	67803
Tuesday, February 22, 2022	70.13	72931
Wednesday, February 23, 2022	68.13	70857
Thursday, February 24, 2022	70.38	73191
Friday, February 25, 2022	69.29	72058
Saturday, February 26, 2022	61.39	63847
Sunday, February 27, 2022	60.90	63340
Monday, February 28, 2022	65.07	67668
	1925.99	2.003 TBtu
Month M + 1	Mar-22	
	2.123	TBtu
Month M + 2	Apr-22	
	2.098	TBtu

Edwin Barbosa Viera

From: Martin Gomez, Daniel <dmarting@naturgy.com>
Sent: Monday, January 31, 2022 3:27 PM
To: Edwin Barbosa Viera; Jorge Cotto Perez; FERDINAND CORREA MENDEZ; Hugal R. Rios Diaz; Manuel Rios Ramirez
Cc: Diez Rodriguez, Ines; Navarro Morente, Esther; Martin Muñoz, Ignacio; Meugniot Camacho, Jose Joaquín Amador; Figuerola Lopez, Rodrigo
Subject: RE: Ninety Day Schedule Costa Sur + Ecoeléctrica February 2022
Importance: High

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Estimados,

Muchas gracias por enviar el NDS de Costa Sur y EcoElectrica para los meses de Febrero a Abril 2022. Sin embargo, Naturgy Aprovisionamientos no podrá cumplir con esas previsiones de consumo propuestas por PREPA en febrero debido a los problemas que Naturgy Aprovisionamientos S.A. viene sufriendo en los últimos meses con su suministrador de Trinidad y Tobago, y a la limitación existente en el tanque de GNL de Ecoeléctrica, que como explicamos impide que se descargue un buque completo, lo que incrementa la dificultad operativa del suministro.

Por lo tanto, con el objeto de asegurar el suministro continuado y garantizar la seguridad del tanque de Ecoeléctrica, rogamos ajusten sus previsiones diarias de consumo en base al siguiente escenario:

- Del 1 al 28 febrero 2022: Consumo conjunto Costa Sur y EcoElectrica de aprox. de 114.4 Mscf/d (119,000 MMBtu/día).

Les agradecemos su colaboración y entendimiento.

Un saludo,

Daniel Martin

De: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>

Enviado el: lunes, 24 de enero de 2022 21:19

Para: Meugniot Camacho, Jose Joaquín Amador <jmeugniot@naturgy.com>; Martin Gomez, Daniel <dmarting@naturgy.com>

CC: Jorge Cotto Perez <JORGE.COTTO@prepa.com>; FERDINAND CORREA MENDEZ <FERDINAND.CORREA@prepa.com>; Hugal R. Rios Diaz <HUGAL.RIOS@prepa.com>; Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>; Manuel Rios Ramirez <MANUEL.RIOS@prepa.com>

Asunto: Ninety Day Schedule Costa Sur + Ecoeléctrica February 2022

GOVERNMENT OF PUERTO RICO
LUMA ENERGY



AMENDED AND RESTATED
NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NATURGY APROVISIONAMIENTOS S.A. (SELLER)

COSTA SUR NINETY DAY PROGRAMME [Clause 7.1 (a)(iii)]*

Month M	Mar-22	
DAY	DAILY MMscf	MMBtu
Tuesday, March 01, 2022	114.79	119383
Wednesday, March 02, 2022	113.86	118412
Thursday, March 03, 2022	114.67	119255
Friday, March 04, 2022	115.03	119631
Saturday, March 05, 2022	115.03	119631
Sunday, March 06, 2022	115.03	119631
Monday, March 07, 2022	115.03	119631
Tuesday, March 08, 2022	115.03	119631
Wednesday, March 09, 2022	115.03	119631
Thursday, March 10, 2022	115.03	119631
Friday, March 11, 2022	115.03	119631
Saturday, March 12, 2022	115.03	119631
Sunday, March 13, 2022	115.03	119631
Monday, March 14, 2022	115.03	119631
Tuesday, March 15, 2022	115.03	119631
Wednesday, March 16, 2022	115.03	119631
Thursday, March 17, 2022	126.04	131085
Friday, March 18, 2022	126.04	131085
Saturday, March 19, 2022	126.04	131085
Sunday, March 20, 2022	126.04	131085
Monday, March 21, 2022	126.04	131085
Tuesday, March 22, 2022	126.04	131085
Wednesday, March 23, 2022	126.04	131085
Thursday, March 24, 2022	126.04	131085
Friday, March 25, 2022	126.04	131085
Saturday, March 26, 2022	126.04	131085
Sunday, March 27, 2022	126.04	131085
Monday, March 28, 2022	126.31	131362
Tuesday, March 29, 2022	126.04	131085
Wednesday, March 30, 2022	126.31	131362
Thursday, March 31, 2022	126.04	131085
	3729.88	3.879 TBtu
Month M + 1	Apr-22	
		3.942 TBtu
Month M + 2	May-22	
		4.085 TBtu

* - The information attached has been requested and for the exclusive use of PREPA. The information is intended to be used by PREPA for various purposes including assisting in their preparation of their nominations of fuel usage. The forecasted generation relied upon assumptions for Capacity Limitations, and Generation Outage Schedules provided by PREPA. LUMA Energy does not assume any responsibility for the Fuel Nominations that PREPA will prepare with this information, and any adjustments to be made to this information will be result from criteria and analysis performed by PREPA.

GOVERNMENT OF PUERTO RICO
LUMA ENERGY



AMENDED AND RESTATED
NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NATURGY APROVISIONAMIENTOS S.A. (SELLER)

ECOELECTRICA NINETY DAY PROGRAMME [Clause 7.1 (a)(iii)]*

Month M	Mar-22	
DAY	DAILY MMscf	MMBtu
Tuesday, March 01, 2022	72.17	75052
Wednesday, March 02, 2022	64.59	67176
Thursday, March 03, 2022	70.81	73639
Friday, March 04, 2022	75.11	78114
Saturday, March 05, 2022	69.04	71800
Sunday, March 06, 2022	64.65	67238
Monday, March 07, 2022	78.64	81786
Tuesday, March 08, 2022	79.37	82544
Wednesday, March 09, 2022	76.57	79631
Thursday, March 10, 2022	75.81	78843
Friday, March 11, 2022	76.16	79207
Saturday, March 12, 2022	60.22	62630
Sunday, March 13, 2022	59.06	61427
Monday, March 14, 2022	68.07	70790
Tuesday, March 15, 2022	67.04	69719
Wednesday, March 16, 2022	64.84	67431
Thursday, March 17, 2022	62.87	65383
Friday, March 18, 2022	62.43	64928
Saturday, March 19, 2022	56.47	58724
Sunday, March 20, 2022	57.05	59331
Monday, March 21, 2022	66.01	68649
Tuesday, March 22, 2022	63.31	65846
Wednesday, March 23, 2022	67.29	69984
Thursday, March 24, 2022	66.34	68995
Friday, March 25, 2022	62.39	64886
Saturday, March 26, 2022	58.80	61153
Sunday, March 27, 2022	58.30	60631
Monday, March 28, 2022	66.24	68893
Tuesday, March 29, 2022	68.29	71020
Wednesday, March 30, 2022	65.38	67997
Thursday, March 31, 2022	60.16	62569
	2063.48	2.146 TBtu
Month M + 1	Apr-22	
	2.094	TBtu
Month M + 2	May-22	
	2.343	TBtu

The information attached has been requested and for the exclusive use of PREPA. The information is intended to be used by PREPA for various purposes including assisting in their preparation of their nominations of fuel usage. The forecasted generation relied upon assumptions for Capacity Limitations, and Generation Outage Schedules provided by PREPA. LUMA Energy does not assume any responsibility for the Fuel Nominations that PREPA will prepare with this information, and any adjustments to be made to this information will be result from criteria and analysis performed by PREPA.

Edwin Barbosa Viera

From: Martin Gomez, Daniel <dmarting@naturgy.com>
Sent: Monday, February 14, 2022 8:21 AM
To: Edwin Barbosa Viera; Angel A. Perez Carrasquillo; Miguel Angel Beauchamp Ramos; FERDINAND CORREA MENDEZ; Jorge Cotto Perez; Mary C Zapata Acosta; Manuel Rios Ramirez
Cc: Navarro Morente, Esther; Martin Muñoz, Ignacio; Meugniot Camacho, Jose Joaquín Amador; Figueroa Velez, Yaritza
Subject: RE: Nominaciones Gas Natural Costa Sur - ECO marzo, abril y mayo 2022
Importance: High

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Estimados,

Muchas gracias por enviar el NDS de Costa Sur y EcoElectrica para los meses de Marzo a Mayo 2022. Sin embargo, Naturgy Aprovevisionamientos no podrá cumplir con esas previsiones de consumo propuestas por PREPA el mes de marzo debido a los problemas que Naturgy Aprovevisionamientos S.A. viene sufriendo en los últimos meses con su suministrador de Trinidad y Tobago, y a la limitación existente en el tanque de GNL de Ecoeléctrica, que como explicamos impide que se descargue un buque completo, lo que incrementa la dificultad operativa del suministro.

Por lo tanto, con el objeto de asegurar el suministro continuado y garantizar la seguridad del tanque de Ecoeléctrica, rogamos ajusten sus previsiones diarias de consumo en base al siguiente escenario:

- **Del 1 al 31 marzo 2022: Consumo conjunto Costa Sur y EcoElectrica de aprox. 119,000 MMBtu/día (114.4 Mscf/d).**

Les agradecemos su colaboración y entendimiento.

Un saludo,

Daniel Martin

From: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>
Sent: Friday, February 4, 2022 4:04:16 PM
To: Meugniot Camacho, Jose Joaquín Amador <jmeugniot@naturgy.com>
Cc: Angel A. Perez Carrasquillo <ANGEL.PEREZC@prepa.com>; Miguel Angel Beauchamp Ramos <MIGUEL.BEAUCHAMP@prepa.com>; FERDINAND CORREA MENDEZ <FERDINAND.CORREA@prepa.com>; Jorge Cotto Perez <JORGE.COTTO@prepa.com>; Mary C Zapata Acosta <MARY.ZAPATA@prepa.com>; Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>; Manuel Rios Ramirez <MANUEL.RIOS@prepa.com>
Subject: Nominaciones Gas Natural Costa Sur - ECO marzo, abril y mayo 2022

GOVERNMENT OF PUERTO RICO
LUMA ENERGY



AMENDED AND RESTATED
NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NATURGY APROVISIONAMIENTOS S.A. (SELLER)

COSTA SUR NINETY DAY PROGRAMME [Clause 7.1 (a)(iii)]*

Month M	Apr-22	
DAY	DAILY MMscf	MMBtu
Friday, April 01, 2022	126.04	131085
Saturday, April 02, 2022	126.04	131085
Sunday, April 03, 2022	126.04	131085
Monday, April 04, 2022	127.84	132949
Tuesday, April 05, 2022	127.16	132246
Wednesday, April 06, 2022	126.04	131085
Thursday, April 07, 2022	126.04	131085
Friday, April 08, 2022	126.04	131085
Saturday, April 09, 2022	126.04	131085
Sunday, April 10, 2022	125.99	131026
Monday, April 11, 2022	127.55	132656
Tuesday, April 12, 2022	130.69	135913
Wednesday, April 13, 2022	130.31	135525
Thursday, April 14, 2022	126.44	131495
Friday, April 15, 2022	126.04	131085
Saturday, April 16, 2022	131.56	136820
Sunday, April 17, 2022	131.21	136461
Monday, April 18, 2022	136.00	141435
Tuesday, April 19, 2022	134.93	140332
Wednesday, April 20, 2022	130.77	135997
Thursday, April 21, 2022	131.12	136365
Friday, April 22, 2022	131.07	136317
Saturday, April 23, 2022	127.19	132276
Sunday, April 24, 2022	126.84	131918
Monday, April 25, 2022	127.48	132584
Tuesday, April 26, 2022	127.97	133088
Wednesday, April 27, 2022	128.03	133154
Thursday, April 28, 2022	128.66	133811
Friday, April 29, 2022	126.04	131085
Saturday, April 30, 2022	126.04	131085
	3849.25	4.003 TBTu
Month M + 1	May-22	
		4.230 TBTu
Month M + 2	Jun-22	
		4.077 TBTu

* - The information attached has been requested and for the exclusive use of PREPA. The information is intended to be used by PREPA for various purposes including assisting in their preparation of their nominations of fuel usage. The forecasted generation relied upon assumptions for Capacity Limitations, and Generation Outage Schedules provided by PREPA. LUMA Energy does not assume any responsibility for the Fuel Nominations that PREPA will prepare with this information, and any adjustments to be made to this information will be result from criteria and analysis performed by PREPA.

GOVERNMENT OF PUERTO RICO
LUMA ENERGY



AMENDED AND RESTATED
NATURAL GAS SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NATURGY APROVISIONAMIENTOS S.A. (SELLER)

ECOELECTRICA NINETY DAY PROGRAMME [Clause 7.1 (a)(iii)]*

Month M	Apr-22	
DAY	DAILY MMscf	MMBtu
Friday, April 01, 2022	56.12	58366
Saturday, April 02, 2022	58.44	60778
Sunday, April 03, 2022	59.71	62099
Monday, April 04, 2022	71.49	74350
Tuesday, April 05, 2022	69.56	72338
Wednesday, April 06, 2022	64.35	66927
Thursday, April 07, 2022	63.29	65822
Friday, April 08, 2022	59.85	62246
Saturday, April 09, 2022	55.09	57291
Sunday, April 10, 2022	57.46	59756
Monday, April 11, 2022	65.95	68590
Tuesday, April 12, 2022	71.45	74305
Wednesday, April 13, 2022	73.31	76246
Thursday, April 14, 2022	63.31	65844
Friday, April 15, 2022	55.34	57558
Saturday, April 16, 2022	70.34	73157
Sunday, April 17, 2022	68.54	71285
Monday, April 18, 2022	80.45	83670
Tuesday, April 19, 2022	78.57	81716
Wednesday, April 20, 2022	77.57	80677
Thursday, April 21, 2022	77.03	80115
Friday, April 22, 2022	75.70	78733
Saturday, April 23, 2022	67.21	69898
Sunday, April 24, 2022	62.16	64643
Monday, April 25, 2022	71.57	74430
Tuesday, April 26, 2022	74.08	77041
Wednesday, April 27, 2022	72.65	75561
Thursday, April 28, 2022	74.92	77914
Friday, April 29, 2022	64.00	66565
Saturday, April 30, 2022	60.84	63272
	2020.38	2.101 Tbtu
Month M + 1	May-22	
	2.398	Tbtu
Month M + 2	Jun-22	
	2.246	Tbtu

* - The information attached has been requested and for the exclusive use of PREPA. The information is intended to be used by PREPA for various purposes including assisting in their preparation of their nominations of fuel usage. The forecasted generation relied upon assumptions for Capacity Limitations, and Generation Outage Schedules provided by PREPA. LUMA Energy does not assume any responsibility for the Fuel Nominations that PREPA will prepare with this information, and any adjustments to be made to this information will be result from criteria and analysis performed by PREPA.

Edwin Barbosa Viera

From: Martin Gomez, Daniel <dmarting@naturgy.com>
Sent: Monday, March 14, 2022 7:51 AM
To: Edwin Barbosa Viera; Jorge Cotto Perez; FERDINAND CORREA MENDEZ; Angel A. Perez Carrasquillo; Miguel Angel Beauchamp Ramos; Manuel Rios Ramirez
Cc: Navarro Morente, Esther; Martin Muñoz, Ignacio; Meugniot Camacho, Jose Joaquín Amador; Figuerola Lopez, Rodrigo; Figueroa Velez, Yaritza
Subject: RE: NDS April to June 2022 Costa Sur + ECO

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Estimados,

Muchas gracias por enviar el NDS de Costa Sur y EcoElectrica para los meses de abril a junio 2022. Sin embargo, Naturgy Aprovisionamientos no podrá cumplir con esas previsiones de consumo propuestas por PREPA el mes de abril debido a los problemas que Naturgy Aprovisionamientos S.A. viene sufriendo en los últimos meses con su suministrador de Trinidad y Tobago, y a la limitación existente en el tanque de GNL de Ecoeléctrica, que como explicamos impide que se descargue un buque completo, lo que incrementa la dificultad operativa del suministro.

Por lo tanto, con el objeto de asegurar el suministro continuado y garantizar la seguridad del tanque de Ecoeléctrica, rogamos ajusten sus previsiones diarias de consumo en base al siguiente escenario:

- **Del 1 al 30 abril 2022: Consumo conjunto Costa Sur y EcoElectrica de aprox. 119,000 MMBtu/día (114.4 Mscf/d).**

Les agradecemos su colaboración y entendimiento.

Un saludo,

Daniel Martin

From: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>
Sent: Thursday, March 3, 2022 12:05 PM
To: Meugniot Camacho, Jose Joaquín Amador <jmeugniot@naturgy.com>
Cc: Jorge Cotto Perez <JORGE.COTTO@prepa.com>; FERDINAND CORREA MENDEZ <FERDINAND.CORREA@prepa.com>; Angel A. Perez Carrasquillo <ANGEL.PEREZC@prepa.com>; Miguel Angel Beauchamp Ramos <MIGUEL.BEAUCHAMP@prepa.com>; Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>; Manuel Rios Ramirez <MANUEL.RIOS@prepa.com>
Subject: NDS April to June 2022 Costa Sur + ECO

CIBERSEGURIDAD NATURGY - Este es un CORREO EXTERNO: Verifique remitente antes de abrir adjuntos o acceder a links

Buenas tardes,

Edwin Barbosa Viera

From: Meugniot Camacho, Jose Joaquín Amador <jmeugniot@naturgy.com>
Sent: Wednesday, January 19, 2022 12:29 PM
To: Jorge Cotto Perez; FERDINAND CORREA MENDEZ; Hugal R. Rios Diaz
Cc: Edwin Barbosa Viera
Subject: FW: Naturgy Aprovisionamientos: Ninety Day Schedule
Attachments: 90DAY PROGRAM JAN2022 TO MAR2022 ECO.pdf; 90DAY PROGRAM JAN2022 TO MAR2022 CS.pdf

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Estimados, espero estén bien. Les escribo esta nota para comentarles que no hemos recibido el NDS con el estimado de consumos de gas natural por unidad (CS y ECO) del mes próximo siguiente por día y el total de los 2 meses subsiguientes.

Les envío el último NDS que nos enviaron y les pregunto cuándo nos pueden enviar el de febrero, marzo y abril del 2022.

Gracias y estoy sus órdenes para cualquier aclaración.

Saludos,

Naturgy 

Joaquin Meugniot
Naturgy Aprovisionamientos, S.A.
LNG Business Unit
jmeugniot@naturgy.com
VIG Tower
1225 Ave Ponce de Leon Suite MZ-02
San Juan, PR 00907
Phone: [1.787.758.3238](tel:1.787.758.3238) | Mobile: [1.787.455.0038](tel:1.787.455.0038)
<http://www.naturgy.com>

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Edwin Barbosa Viera

From: Meugniot Camacho, Jose Joaquín Amador <jmeugniot@naturgy.com>
Sent: Friday, January 14, 2022 10:16 AM
To: Mary C Zapata Acosta; Edwin Barbosa Viera; Gary F Soto-Fernandez; Salvador Serrano-Menendez; Miguel Angel Beauchamp Ramos; Angel A. Perez Carrasquillo; Wanda L Esteras
Cc: Echevarria Munilla, Jose Maria; Navarro Morente, Esther; Rodriguez Martinez, Nuria; Figuerola Lopez, Rodrigo; Figueroa Velez, Yaritza; Martin Gomez, Daniel; Martin Muñoz, Ignacio
Subject: NASA/PREPA Periodos mantenimiento 2022

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Estimados,

En relación al ADP 2022 que PREPA debe enviar conforme a la cláusula 7.1.a.ii del Contrato de Suministro, rogamos tengan en cuenta el siguiente periodo de mantenimiento inicialmente previstos por EcoElectrica para el año 2022:

1. Mantenimiento el cual incluye la unidad CT2, el total de la Terminal de LNG y planta y, la Tubería de Transmisión de Gas (*Gas Transmission Pipeline (GTP)*); durante este mantenimiento, los servicios de *Tolling* serán interrumpidos por el período de Octubre 7 del 2022 a las 24:00 horas hasta Octubre 19 del 2022 a las 24:00 horas.

Les mantendremos informados de cualquier cambio que pudiera producirse en dicha planificación.

Reciban un cordial saludo,

Naturgy 

Joaquin Meugniot

Naturgy Aprovevisionamientos, S.A.

LNG Business Unit

jmeugniot@naturgy.com

VIG Tower

1225 Ave Ponce de Leon Suite 705

San Juan, PR 00907

Phone: [1.787.758.3238](tel:1.787.758.3238) | Mobile: [1.787.455.0038](tel:1.787.455.0038)

<http://www.naturgy.com>

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Via electronic mail

Puerto Rico Electric Power Authority

Apartado 363928

San Juan, Puerto Rico 00936-3928

Attention: Edwin Barbosa

Edwin.barbosa@prepa.com

Fuel Office Manager

Madrid, 3rd December, 2021

RE: Amended & Restated Natural Gas Sale and Purchase Agreement between Naturgy Aprovevisionamientos S.A. ("Naturgy") and Puerto Rico Electric Power Authority ("PREPA") dated March 23rd, 2020 (the "Agreement")

Dear Sirs,

Following to our previous communications, we hereby request you to urgently provide us with the ADP for Contract Year 2022 (which should have been issued on 1st October, 2021) and the NDS for the period from December 2021 to February 2022 (which should have been issued on 5th November, 2021) in compliance with the provisions of Clauses 7.1(a)(ii) and 7.1(a)(iii) of the Agreement.

Non-compliance with the referred provisions of the Agreement prevents Naturgy from meeting PREPA's Natural Gas needs in a forecasted and orderly manner. The absence of final scheduling exposes Naturgy to unreasonable uncertainty and may result in severe mismatchings between scheduled LNG cargo deliveries and Natural Gas consumptions under the Agreement.

In addition, please note that as per the information received, Costa Sur was expected not to consume Natural Gas from the 13th to the 15th of November due to scheduled maintenance work at EcoEléctrica during which tolling services were interrupted. However, Natural Gas consumption at Costa Sur was dramatically reduced to very low levels. In fact, except for the period from 24th to 28th November with low consumption rates, consumption was practically nil for the period from the 11th to the 30th of November.

As a result of the lack of scheduling and anticipation, Naturgy is undergoing serious logistic problems related to the LNG cargo deliveries and the consequent increase in the associated operating costs. For future incidents or unscheduled maintenance, we respectfully request PREPA to promptly inform Naturgy of any potential impact on the scheduled Natural Gas consumption of both EcoEléctrica and Costa Sur.

Naturgy hereby reserves all of its rights under the Agreement and at law.

Yours sincerely,

Jose M Echevarria

José María Echevarría

Authorized Representative

Edwin Barbosa Viera

From: Martin Gomez, Daniel <dmarting@naturgy.com>
Sent: Tuesday, December 1, 2020 2:02 PM
To: Daniel Hernandez Morales; Edwin Barbosa Viera; Manuel Rios Ramirez; GARY SOTO FERNÁNDEZ; JAVIER SOTO SUAREZ; SALVADOR SERRANO MENENDEZ; Miguel Angel Beauchamp Ramos; Angel A. Perez Carrasquillo; Jose L. Carrasco Arroyo; EDWIN ADORNO GONZALEZ; MARCOS RALAT RAMOS; Jorge Cotto Perez; Nelson Morales Rivera; Fernando M. Padilla Padilla; Francisco Santos Rivera
Cc: Echevarria Munilla, Jose Maria; Navarro Morente, Esther; Guerra Soriano, Emilio; Gonzalez Yague, Isabel; Figuerola Lopez, Rodrigo; Meugniot Camacho, Jose Joaquín Amador
Subject: <<EXTERNAL EMAIL>> RE: NASA/PREPA Periodos mantenimiento 2021

Estimados,

Según comunicación recibida de Ecoeléctrica, les confirmamos que el período previsto para la realización del mantenimiento programado en el año 2021 durante el cual los servicios de Tolling serán interrumpidos será entre el viernes 6 de agosto 24:00 hrs y el Lunes 9 de Agosto 24:00 hrs (duración de 72 hrs).

Les mantendremos informados de cualquier novedad al respecto.

Reciban un cordial saludo,

Daniel Martin

De: Martin Gomez, Daniel

Enviado el: jueves, 29 de octubre de 2020 19:15

Para: Daniel Hernandez Morales <DANIEL.HERNANDEZM@prepa.com>; Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>; Manuel Rios Ramirez <MANUEL.RIOS@prepa.com>; GARY SOTO FERNÁNDEZ <GARY.SOTO@prepa.com>; JAVIER SOTO SUAREZ <JAVIER.SOTO@prepa.com>; SALVADOR SERRANO MENENDEZ <SALVADOR.SERRANO@prepa.com>; Miguel Angel Beauchamp Ramos <MIGUEL.BEAUCHAMP@prepa.com>; Angel A. Perez Carrasquillo <ANGEL.PEREZC@prepa.com>; Jose L. Carrasco Arroyo <JOSE.CARRASCO@prepa.com>; EDWIN ADORNO GONZALEZ <EADORNO9363@aeepr.com>; MARCOS RALAT RAMOS <MARCOS.RALAT@prepa.com>; Jorge Cotto Perez <JORGE.COTTO@prepa.com>; 'Nelson Morales Rivera (Nelson.Morales@prepa.com)' <Nelson.Morales@prepa.com>; Fernando M. Padilla (FERNANDO.PADILLA@prepa.com) <FERNANDO.PADILLA@prepa.com>; FRANCISCO.SANTOS@prepa.com

CC: Jose Maria Echevarria Munilla (jmechevarria@naturgy.com) <jmechevarria@naturgy.com>; Navarro Morente, Esther <enavarro@naturgy.com>; Emilio Guerra Soriano (eguerria@naturgy.com) <eguerria@naturgy.com>; Gonzalez Yague, Isabel <igonzalety@naturgy.com>; Rodrigo Figuerola Lopez (rlopezf@naturgy.com) <rlopezf@naturgy.com>; Meugniot Camacho, Jose Joaquín Amador <jmeugniot@naturgy.com>

Asunto: NASA/PREPA Periodos mantenimiento 2021

Estimados,

En relación al ADP 2021 que PREPA debe enviar conforme a la cláusula 7.1.a.ii del Contrato de Suministro, rogamos tengan en cuenta los siguientes periodos de mantenimiento inicialmente previstos por EcoElectrica para el año 2021:

1. Mantenimiento Total de la planta durante el cual los servicios de Tolling serán interrumpidos, sería por un periodo de 72hrs (3días) a partir del 6 de agosto 2021 a las 24:00h.

2. Mantenimiento de la Turbina de Gas #1, por un periodo de 720hrs (30 días) a partir del 6 de agosto 2021 a las 24:00h.
3. Mantenimiento de la Turbina de Vapor, por un periodo de 72 hrs (3días) a partir del 6 de agosto 2021. En el caso de que fuera necesario reemplazar las palas de la turbina, el periodo sería de 432 hrs (18 días).

Les mantendremos informados de cualquier cambio que pudiera producirse en dicha planificación.

Reciban un cordial saludo,



DANIEL MARTIN GOMEZ
Gestión de Contratos (GNL)

Tel. +34 912015761
RPV Fijo: 23761
RPV Móvil: 123761
dmarting@naturgy.com

NATURGY LNG, S.L.
Avenida SAN LUIS 77 pl. 02
28033 Madrid (España)
www.naturgy.com

Antes de imprimir este mensaje, asegúrese de que es necesario hacerlo. Protejamos el medio ambiente

From: Navarro Morente, Esther <enavarro@naturgy.com>

Sent: Monday, November 29, 2021 6:09 AM

To: Maria Mercedes Aponte Morales <MARIA.APONTE@prepa.com>; Josué Colón Ortiz <josue.colon@prepa.com>; Mary C Zapata Acosta <MARY.ZAPATA@prepa.com>; Jaime A López Díaz <JLOPEZ@prepa.com>; Meugniot Camacho, Jose Joaquín Amador <jmeugniot@naturgy.com>; Lionel Santa Crispin <LIONEL.SANTA@prepa.com>; Morales Schmid, Gregorio <gmorales@naturgy.com>; Echevarria Munilla, Jose Maria <jmechevarria@naturgy.com>; Naturgy LNG Puerto Rico <lngpr@naturgy.com>; Devoto Bettini, M^a Dolores <mddevoto@naturgy.com>

Cc: JOSSIE ESTHER OCASIO MORALES <JOSSIE.OCASIO@prepa.com>; Griselle Montalvo Vázquez <GRISELLE.MONTALVO@prepa.com>; Maria Judith Franco Noguerras <MARIA.FRANCO@prepa.com>

Subject: RE: Naturgy - Gas Natural

Dear PREPA team,

Thank you for your time and the meeting held this month. As explained during the meeting we are facing at the moment problems with the LNG supply coming from Trinidad & Tobago, that are in majority the LNG volumes that we deliver to Puerto Rico. As you may understand, LNG supplied from Trinidad & Tobago is a relevant factor for our contract, since due to the proximity of both islands (2 days trip) this source allows us to accommodate the logistic of vessels to PREPA's needs, including maintenance of plants, current repairment of CS6 and the lack of schedule of consumption we discussed with you.

We actually wanted to anticipate what is happening first hand and to agree on an adequate supply level of natural gas in order to minimize natural gas consumption in the power plants at least from now to March (more realistically, first quarter 2022).

Naturgy would compensate the purchase of the necessary fuel to replace the reduced gas (please see in the attached file our fuel price proposal that is based on the price reference for fuel existing in the current GSA).

As explained, our goal is to have this proposal negotiated among the parties as soon as practically possible in December, to be implemented at the beginning of the year. After our conversation we think that the most appropriate scenario would be a gas delivery equivalent to Eco 100% on gas and CS 40%-50% on gas.

Once again, let us reinforce that we are facing problems in Trinidad and we are afraid that the situation will not improve in January. For this reason our preference is to reach an agreement in that regard under the Contract.

Please, find attached the theoretical models based on actual delivery pattern we estimate for CS. We'd appreciate your prompt feedback. We are available to set up a call or meeting at your convenience to determine the analysis and conclusions.

We look forward to hearing from you.

Best Regards
Esther

-----Cita original-----

De: Maria Mercedes Aponte Morales <MARIA.APONTE@prepa.com>

Enviado el: jueves, 4 de noviembre de 2021 22:14

Para: Maria Mercedes Aponte Morales; Josué Colón Ortiz; Mary C Zapata Acosta; Jaime A López Díaz; Meugniot Camacho, Jose Joaquín Amador; Lionel Santa Crispin

CC: JOSSIE ESTHER OCASIO MORALES; Griselle Montalvo Vázquez; Maria Judith Franco Noguerras; Navarro Morente, Esther

Asunto: Naturgy - Gas Natural

Cuándo: martes, 16 de noviembre de 2021 15:30-16:00 (UTC-04:00) Georgetown, La Paz, Manao, San Juan.

Ubicación: Oficina Director Ejecutivo, NEOS 801

CIBERSEGURIDAD NATURGY - Este es un CORREO EXTERNO: Verifique remitente antes de abrir adjuntos o acceder a links

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Edwin Barbosa Viera

From: Martin Gomez, Daniel <dmarting@naturgy.com>
Sent: Thursday, October 29, 2020 2:15 PM
To: Daniel Hernandez Morales; Edwin Barbosa Viera; Manuel Rios Ramirez; GARY SOTO FERNÁNDEZ; JAVIER SOTO SUAREZ; SALVADOR SERRANO MENENDEZ; Miguel Angel Beauchamp Ramos; Angel A. Perez Carrasquillo; Jose L. Carrasco Arroyo; EDWIN ADORNO GONZALEZ; MARCOS RALAT RAMOS; Jorge Cotto Perez; Nelson Morales Rivera; Fernando M. Padilla Padilla; Francisco Santos Rivera
Cc: Echevarria Munilla, Jose Maria; Navarro Morente, Esther; Guerra Soriano, Emilio; Gonzalez Yague, Isabel; Figuerola Lopez, Rodrigo; Meugniot Camacho, Jose Joaquín Amador
Subject: <<EXTERNAL EMAIL>>NASA/PREPA Periodos mantenimiento 2021

Estimados,

En relación al ADP 2021 que PREPA debe enviar conforme a la cláusula 7.1.a.ii del Contrato de Suministro, rogamos tengan en cuenta los siguientes periodos de mantenimiento inicialmente previstos por EcoElectrica para el año 2021:

1. Mantenimiento Total de la planta durante el cual los servicios de Tolling serán interrumpidos, sería por un periodo de 72hrs (3días) a partir del 6 de agosto 2021 a las 24:00h.
2. Mantenimiento de la Turbina de Gas #1, por un periodo de 720hrs (30 días) a partir del 6 de agosto 2021 a las 24:00h.
3. Mantenimiento de la Turbina de Vapor, por un periodo de 72 hrs (3días) a partir del 6 de agosto 2021. En el caso de que fuera necesario reemplazar las palas de la turbina, el periodo sería de 432 hrs (18 días).

Les mantendremos informados de cualquier cambio que pudiera producirse en dicha planificación.

Reciban un cordial saludo,



DANIEL MARTIN GOMEZ
Gestión de Contratos (GNL)

Tel. +34 912015761
RPV Fijo: 23761
RPV Móvil: 123761
dmarting@naturgy.com









NATURGY LNG, S.L.
Avenida SAN LUIS 77 pl. 02
28033 Madrid (España)
www.naturgy.com

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GOBIERNO DE PUERTO RICO
AUTORIDAD DE ENERGÍA ELÉCTRICA

Reunión
New Fortress

10 de febrero de 2022	Hora: 11:00 a. m.	Oficina: NEOS 801	
Nombre	Firma	Número de Teléfono	Correo Electrónico
Josué A. Colón Ortiz		787-521-4671	josue.colon@prepa.com
Jaime A. Umpierre		787-367-5457	jaime.umpierre@prepa.com
Edwin Barbosa		787-521-4005	edwin.barbosa@prepa.com
Jorge L. Cotto Pérez		939-579-0674	jorge.cotto@prepa.com
Astrid Rodríguez		787-521-4661	ASTRID.RODRIGUEZ@prepa.com
LIONEL SANTA		787-521-4912	Lionel.Santa@prepa.com
Winnifred Trujillo		786-526-9607	winnifred@newfortressny.com
Mary C. Zapata Acosta		787-521-1351	mary.zapata@prepa.com
* Sr. Wes Edens			
* Sr. Sam Abdalla			

* Se reunieron con el Director en su oficina.



14 de diciembre de 2021

Hora: 8:30 a.m.

Oficina: NEOS 801

[illegible]



GOBIERNO DE PUERTO RICO
AUTORIDAD DE ENERGÍA ELÉCTRICA

Reunión New Fortress Energy			
30 de noviembre de 2021	Hora: 10:30 a.m.		Oficina: NEOS 801
Nombre	Firma	Número de Teléfono	Correo Electrónico
Josué A. Colón Ortiz		787-521-4671	josue.colon@prepa.com
LIONEL SANTA		787-521-4912	Lionel.Santa@prepa.com
Edwin Barbosa		787-521-4095	edwin.barbosa@prepa.com
Víctor Ortiz		787-521-7407	victor.ortiz@prepa.com
Anthony Vega		787-521-3262	anthony.vega@prepa.com
Jaime A. López Díaz		787-521-1932	jlopez@prepa.com
Jaime A. Umpierre		787-367-5457	jaime.umpierre@prepa.com
Lawrence Spaulding		606-371-7401	
Ninnie Trujano		646 959 9000	
Jorge E. Sanchez Valle		786-506-9684	wirizamy@newfortressenergy.com Jorge.Sanchez@prepa.com
		787-521-4931	

COMMONWEALTH OF PUERTO RICO
LUMA ENERGY SERVCO, LLC



FUEL SALE AND PURCHASE AGREEMENT
BETWEEN
PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND
NFENERGIA LLC (SELLER)

ANNUAL CONTRACT QUANTITY (ACQ)*
Contract Year 2022
[Clause 7.4 (a)(i)]

	Q1 (TBtu)	Q2 (TBtu)	Q3 (TBtu)	Q4 (TBtu)	ACQ (TBtu)
Jan-22					17.935
Feb-22					
Mar-22					
Apr-22					
May-22					
Jun-22					
Jul-22					
Aug-22					
Sep-22					
Oct-22					
Nov-22					
Dec-22					

Unit Outages

SJ 5	15-Jan-22	16-Jun-22	Major Inspection
SJ 6	4-Jun-22	25-Jun-22	Combustion Inspection

The information attached has been requested and for the exclusive use of PREPA. The information is intended to be used by PREPA for various purposes including assisting in their preparation of their nominations of fuel usage. The forecasted generation relied upon assumptions for Capacity Limitations, and Generation Outage Schedules provided by PREPA. LUMA Energy does not assume any responsibility for the Fuel Nominations that PREPA will prepare with this information, and any adjustments to be made to this information will be result from criteria and analysis performed by PREPA.

COMMONWEALTH OF PUERTO RICO
LUMA ENERGY SERVCO, LLC



FUEL SALE AND PURCHASE AGREEMENT
BETWEEN
PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND
NFENERGIA LLC (SELLER)

ANNUAL DELIVERY PROGRAMME (ADP)*
Contract Year 2022
[Clause 7.4 (a)(ii)]

	Q1 (TBtu)	Q2 (TBtu)	Q3 (TBtu)	Q4 (TBtu)	ACQ (TBtu)
Jan-22	3.348				17.935
Feb-22					
Mar-22					
Apr-22		2.738			
May-22					
Jun-22					
Jul-22			5.953		
Aug-22					
Sep-22					
Oct-22				5.896	
Nov-22					
Dec-22					

Unit Outages

SJ 5	15-Jan-22	16-Jun-22	Major Inspection
SJ 6	4-Jun-22	25-Jun-22	Combustion Inspection

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LUMA ENERGY SERVC, LLC
SYSTEM OPERATIONS



FUEL SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NFENERGIA LLC (SELLER)

NATURAL GAS PROGRAMME

Month M	Jan-22	
DAY	DAILY MMscf	MMBtu
Saturday, January 01, 2022	59.20	61564
Sunday, January 02, 2022	59.30	61672
Monday, January 03, 2022	59.52	61904
Tuesday, January 04, 2022	59.52	61904
Wednesday, January 05, 2022	59.89	62289
Thursday, January 06, 2022	59.43	61806
Friday, January 07, 2022	60.94	63382
Saturday, January 08, 2022	60.99	63431
Sunday, January 09, 2022	60.45	62867
Monday, January 10, 2022	60.77	63203
Tuesday, January 11, 2022	62.36	64858
Wednesday, January 12, 2022	62.39	64884
Thursday, January 13, 2022	63.06	65582
Friday, January 14, 2022	63.43	65963
Saturday, January 15, 2022	30.70	31925
Sunday, January 16, 2022	31.10	32341
Monday, January 17, 2022	30.73	31957
Tuesday, January 18, 2022	31.76	33032
Wednesday, January 19, 2022	32.63	33937
Thursday, January 20, 2022	32.34	33635
Friday, January 21, 2022	31.79	33065
Saturday, January 22, 2022	34.09	35453
Sunday, January 23, 2022	33.08	34408
Monday, January 24, 2022	32.35	33646
Tuesday, January 25, 2022	33.79	35143
Wednesday, January 26, 2022	33.88	35236
Thursday, January 27, 2022	33.67	35013
Friday, January 28, 2022	34.18	35551
Saturday, January 29, 2022	31.90	33174
Sunday, January 30, 2022	33.59	34935
Monday, January 31, 2022	31.81	33081

1404.66

1.461

TBtu

Month M + 1 Feb-22

0.949

TBtu

Month M + 2 Mar-22

0.958

TBtu

LUMA ENERGY SERVCO, LLC
SYSTEM OPERATIONS



FUEL SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NFENERGIA LLC (SELLER)

NINETY DAY SCHEDULE [Clause 7.4 (a)(iv)]

Month M	Feb-22	
DAY	DAILY MMscf	MMBtu
Tuesday, February 01, 2022	31.26	32505
Wednesday, February 02, 2022	31.73	32997
Thursday, February 03, 2022	32.36	33652
Friday, February 04, 2022	32.36	33652
Saturday, February 05, 2022	30.57	31790
Sunday, February 06, 2022	30.56	31777
Monday, February 07, 2022	31.43	32688
Tuesday, February 08, 2022	31.37	32627
Wednesday, February 09, 2022	30.97	32210
Thursday, February 10, 2022	31.12	32363
Friday, February 11, 2022	30.12	31327
Saturday, February 12, 2022	29.91	31105
Sunday, February 13, 2022	29.74	30930
Monday, February 14, 2022	30.98	32223
Tuesday, February 15, 2022	31.14	32388
Wednesday, February 16, 2022	30.89	32130
Thursday, February 17, 2022	31.32	32578
Friday, February 18, 2022	30.85	32088
Saturday, February 19, 2022	30.19	31394
Sunday, February 20, 2022	30.41	31630
Monday, February 21, 2022	30.83	32059
Tuesday, February 22, 2022	31.18	32424
Wednesday, February 23, 2022	31.18	32429
Thursday, February 24, 2022	31.10	32346
Friday, February 25, 2022	31.06	32298
Saturday, February 26, 2022	30.15	31358
Sunday, February 27, 2022	30.22	31427
Monday, February 28, 2022	30.34	31554
	865.34	0.900 TBtu
Month M + 1	Mar-22	
		0.987 TBtu
Month M + 2	Apr-22	
		0.961 TBtu

GOVERNMENT OF PUERTO RICO
LUMA ENERGY



FUEL SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NFENERGIA LLC (SELLER)

NINETY DAY SCHEDULE [Clause 7.4 (a)(iv)]*

Month M	Mar-22	
DAY	DAILY MMscf	MMBtu
Tuesday, March 01, 2022	31.12	32364
Wednesday, March 02, 2022	30.76	31994
Thursday, March 03, 2022	31.11	32356
Friday, March 04, 2022	31.69	32955
Saturday, March 05, 2022	29.91	31103
Sunday, March 06, 2022	30.00	31200
Monday, March 07, 2022	30.56	31781
Tuesday, March 08, 2022	30.42	31638
Wednesday, March 09, 2022	30.38	31598
Thursday, March 10, 2022	30.24	31452
Friday, March 11, 2022	30.23	31444
Saturday, March 12, 2022	29.81	31003
Sunday, March 13, 2022	29.85	31044
Monday, March 14, 2022	30.27	31480
Tuesday, March 15, 2022	30.24	31452
Wednesday, March 16, 2022	29.85	31042
Thursday, March 17, 2022	30.21	31420
Friday, March 18, 2022	30.06	31259
Saturday, March 19, 2022	29.61	30800
Sunday, March 20, 2022	29.68	30868
Monday, March 21, 2022	30.57	31791
Tuesday, March 22, 2022	30.52	31737
Wednesday, March 23, 2022	30.41	31626
Thursday, March 24, 2022	30.62	31842
Friday, March 25, 2022	29.92	31121
Saturday, March 26, 2022	29.69	30882
Sunday, March 27, 2022	29.80	30994
Monday, March 28, 2022	30.78	32008
Tuesday, March 29, 2022	30.61	31837
Wednesday, March 30, 2022	30.71	31937
Thursday, March 31, 2022	29.78	30976
	939.43	0.977 TBtu
Month M + 1	Apr-22	
	0.959	TBtu
Month M + 2	May-22	
	1.016	TBtu

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GOVERNMENT OF PUERTO RICO
LUMA ENERGY



FUEL SALE AND PURCHASE AGREEMENT
BETWEEN PUERTO RICO ELECTRIC POWER AUTHORITY (BUYER)
AND NFENERGIA LLC (SELLER)

NINETY DAY SCHEDULE [Clause 7.4 (a)(iv)]*

Month M	Apr-22	
DAY	DAILY MMscf	MMBtu
Friday, April 01, 2022	29.60	30780
Saturday, April 02, 2022	29.63	30811
Sunday, April 03, 2022	30.04	31238
Monday, April 04, 2022	31.54	32805
Tuesday, April 05, 2022	31.11	32359
Wednesday, April 06, 2022	29.90	31093
Thursday, April 07, 2022	29.71	30894
Friday, April 08, 2022	29.63	30816
Saturday, April 09, 2022	29.60	30780
Sunday, April 10, 2022	29.66	30850
Monday, April 11, 2022	31.18	32429
Tuesday, April 12, 2022	31.74	33009
Wednesday, April 13, 2022	31.77	33041
Thursday, April 14, 2022	30.44	31654
Friday, April 15, 2022	29.60	30780
Saturday, April 16, 2022	31.62	32881
Sunday, April 17, 2022	31.53	32788
Monday, April 18, 2022	32.97	34288
Tuesday, April 19, 2022	32.28	33570
Wednesday, April 20, 2022	31.73	32999
Thursday, April 21, 2022	31.96	33235
Friday, April 22, 2022	32.16	33449
Saturday, April 23, 2022	31.02	32264
Sunday, April 24, 2022	30.60	31820
Monday, April 25, 2022	31.66	32931
Tuesday, April 26, 2022	31.66	32927
Wednesday, April 27, 2022	31.47	32725
Thursday, April 28, 2022	32.03	33313
Friday, April 29, 2022	30.19	31397
Saturday, April 30, 2022	30.08	31285
	928.09	0.965 TBtu
Month M + 1	May-22	
	1.032	TBtu
Month M + 2	Jun-22	
	0.771	TBtu

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Edwin Barbosa Viera

From: Radames J. Alvarado Bonilla
Sent: Friday, March 11, 2022 12:51 PM
To: Edwin Barbosa Viera
Subject: RE: New Fortress Energy San Juan MFH Terminal - Solicitud para Cambio de Gas Natural CANT -187 / SJ6 18FEB2022 ~ 1800HRS APROX (TBC)

Gracias Edwin

De: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>
Enviado: viernes, 11 de marzo de 2022 12:44 p. m.
Para: Radames J. Alvarado Bonilla <RADAMES.ALVARADO@prepa.com>
Cc: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>
Asunto: RE: New Fortress Energy San Juan MFH Terminal - Solicitud para Cambio de Gas Natural CANT -187 / SJ6 18FEB2022 ~ 1800HRS APROX (TBC)

Saludos,

A partir de abril 1 debemos tener normalidad según nuestra última conversación.

Edwin

From: Radames J. Alvarado Bonilla <RADAMES.ALVARADO@prepa.com>
Sent: Friday, March 11, 2022 12:33 PM
To: Winnie Irizarry <wirizarry@newfortressenergy.com>; Carlos Faris <cfaris@newfortressenergy.com>; Orlando Rosado <orosado@newfortressenergy.com>; Shakira Mosquera <smosquera@newfortressenergy.com>; Alejandro Vazquez <avazquez@newfortressenergy.com>
Cc: Victor Ortiz Perez <VICTOR.ORTIZ@prepa.com>; Javier Rodriguez Martinez <JAVIER.RODRIGUEZ@prepa.com>; Angel A. Perez Carrasquillo <ANGEL.PEREZC@prepa.com>; Jorge Cotto Perez <JORGE.COTTO@prepa.com>; Josué Colón Ortiz <josue.colon@prepa.com>; Lionel Santa Crispin <LIONEL.SANTA@prepa.com>; Manuel Rios Ramirez <MANUEL.RIOS@prepa.com>; Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>
Subject: RE: New Fortress Energy San Juan MFH Terminal - Solicitud para Cambio de Gas Natural CANT -187 / SJ6 18FEB2022 ~ 1800HRS APROX (TBC)

Saludos

¿Cuándo se normalizan las Operaciones de tener el barco fijo en el terminal?

En el correo adjunto la logística esta hasta el 16 de marzo.



Radamés Alvarado Bonilla, P.E.

Central San Juan

Sección de Operación

787-392-2889

787-521- 7404/7405

De: Winnie Irizarry <wirizarry@newfortressenergy.com>

Enviado: viernes, 18 de febrero de 2022 4:53 p. m.

Para: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>; Carlos Faris <cfaris@newfortressenergy.com>; Radames J. Alvarado Bonilla <RADAMES.ALVARADO@prepa.com>; Orlando Rosado <orosado@newfortressenergy.com>; Shakira Mosquera <smosquera@newfortressenergy.com>; Alejandro Vazquez <avazquez@newfortressenergy.com>

Cc: Victor Ortiz Perez <VICTOR.ORTIZ@prepa.com>; Javier Rodriguez Martinez <JAVIER.RODRIGUEZ@prepa.com>; Angel A. Perez Carrasquillo <ANGEL.PEREZC@prepa.com>; Jorge Cotto Perez <JORGE.COTTO@prepa.com>; Josué Colón Ortiz <josue.colon@prepa.com>; Lionel Santa Crispin <LIONEL.SANTA@prepa.com>; Manuel Rios Ramirez <MANUEL.RIOS@prepa.com>

Asunto: RE: New Fortress Energy San Juan MFH Terminal - Solicitud para Cambio de Gas Natural CANT -187 / SJ6
18FEB2022 ~ 1800HRS APROX (TBC)

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Buenas tardes a todos,

Perdonen la tardanza en la contestación de este correo, estábamos esperando confirmación del operador de los barcos en cuanto a la disponibilidad de un nuevo barco para suplir San Juan.

Quiero comenzar dando un poco de contexto de cómo trabajan las operaciones de logística en el terminal de San Juan. NFE tiene asignados dos barcos al terminal, el primero es el "Ineos Independence" y el otro es el Coral Encanto.

El plan era traer el "Ineos Independence" hoy 18 de Febrero, que ocurrió?, Tuvimos un problema con la temperatura del LNG (subió a -140c, típicamente debe ser -160c). Eso representaba un riesgo operacional y la compañía decidió desviar ese barco a Jamaica para regasificarlo el LNG en el FSRU de Old Harbor. Este problema de la temperatura del Gas, afectó los planes que teníamos de tener el Ineos Independence a San Juan hoy, pero para cumplir con el compromiso de traer gas, se coordinó el envío del barco Coral Anthelia.

Otro problema que tuvimos en días recientes fue que se le dañó el motor principal al Coral Encanto en México. Luego de varios días buscando opciones, el operador del barco va a reemplazarlo con el Ineos Insight que llegara en Abril 1.

El Coral Anthelia está ya en el terminal, comenzamos con el proceso de conexión y "cool down" del sistema. Necesitamos 3-4 para verificar que todos los sistemas están operando normalmente y ya pudiéramos comenzar a suplir gas. Con este barco fue que se comisionó el Terminal en Marzo 2020.

El Plan logístico para los próximos 30 días.

- Coral Anthelia (Febrero 19-22 o 23 depende el consumo)
- Ineos Independence (Febrero 28- Marzo 16)
- Coral Anthelia (Marzo 16) Esperando confirmación para "STS transfer"



Saludos,

Edwin Barbosa Viera

From: Winnie Irizarry <wirizarry@newfortressenergy.com>
Sent: Friday, March 4, 2022 9:47 AM
To: Edwin Barbosa Viera
Cc: FERDINAND CORREA MENDEZ; Jorge Cotto Perez; Víctor Ortiz Perez; Radames J. Alvarado Bonilla; Manuel Rios Ramirez
Subject: RE: NDS April to June 2022 San Juan CC

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Confirmamos recibo de nominaciones.

Saludos,

Winnie

From: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>
Sent: Thursday, March 3, 2022 11:03 AM
To: Winnie Irizarry <wirizarry@newfortressenergy.com>
Cc: FERDINAND CORREA MENDEZ <FERDINAND.CORREA@prepa.com>; Jorge Cotto Perez <JORGE.COTTO@prepa.com>; Víctor Ortiz Perez <VICTOR.ORTIZ@prepa.com>; Radames J. Alvarado Bonilla <RADAMES.ALVARADO@prepa.com>; Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>; Manuel Rios Ramirez <MANUEL.RIOS@prepa.com>
Subject: NDS April to June 2022 San Juan CC

Buenas tardes,

Incluyo "NDS" de referencia para el periodo de abril a Junio 2022.

Saludos,

Edwin Barbosa
Fuels Office Manager
Office 702 NEOS building
787-521-4005
787-406-5248
edwin.barbosa@prepa.com

Edwin Barbosa Viera

From: Edwin Barbosa Viera
Sent: Monday, February 28, 2022 6:01 PM
To: Winnie Irizarry
Cc: Jorge Cotto Perez; Mary C Zapata Acosta; Raphael Gignac; Edwin Barbosa Viera; Manuel Rios Ramirez
Subject: FW: NFE Natural Gas for San Juan 5 & 6

Hi Winnie,

Please confirm if after the INEOS Independence arrived, NFE expectations is to supply gas to PREPA continuously from now on. LUMA needs this information for the next three (3) months nomination period.

Regards,

Edwin

From: Salvador Serrano-Menendez <Salvador.Serrano@Lumapr.com>
Sent: Monday, February 28, 2022 5:52 PM
To: Edwin Barbosa Viera <EDWIN.BARBOSA@prepa.com>
Cc: Jorge Cotto Perez <JORGE.COTTO@prepa.com>; Mary C Zapata Acosta <MARY.ZAPATA@prepa.com>; Raphael Gignac <Raphael.Gignac@Lumapr.com>; Nadya N Linero <Nadya.Linero@Lumapr.com>
Subject: NFE Natural Gas for San Juan 5 & 6

Good afternoon,

To complete the studies for the San Juan 5 and 6 natural gas nominations, we need to know if they are going to use natural gas for the next three months continuously or if they are going to switch to diesel periodically. We need this information as soon as possible to send the nominations before March 5, 2022. Thank you in advance.

Salvador Serrano Menendez
Manager, Energy Management
System Operations



☎ 787 399 2178
✉ salvador.serrano@lumapr.com
🖱 lumapr.com

LUMA Energy ServCo, LLC, a Puerto Rico limited liability company



GOBIERNO DE PUERTO RICO

AUTORIDAD DE ENERGÍA ELÉCTRICA

F. Petición: Archivo y hojas de trabajo con información de apoyo: procedencia de valores y cálculo, si alguno, y la información en que se basó cada uno de estos puntos. Igualmente, la base de todos los valores que se utilizaron para los cálculos incluyendo el 1% diario, Marino 0.5%, Platts 1%, y Henry Hub. Esto debe incluir la metodología utilizada para calcular los precios de bunker C y el archivo con precio de mercado y cálculos.

Respuesta: Ver anejos. Los valores de CME Group se obtienen mediante publicaciones gratis en Internet. Sin embargo, dichas publicaciones solo permiten la visibilidad de los últimos 4 días. Por esta razón se computó un nuevo pronóstico válido al 23 de marzo de 2022 para demostrar el mecanismo de pronóstico de precios (Fuels Forecast Calculation.xls).

Se incluyen a continuación los “links” para las publicaciones de CME Group:

- www.cmegroup.com/markets/energy/refined-products/new-york-harbor-residual-fuel-1pct-sulfur-platts-swap.settlements.html
- www.cmegroup.com/markets/energy/natural-gas/natural-gas.settlements.html
- www.cmegroup.com/markets/energy/refined-products/heating-oil.settlements.html#tradeDate=12%2F07%2F2021

Los valores Marine 0.5% + 2.88 se obtienen del archivo de cálculo de precios en Excel que prepara la Autoridad (JANDEC-2018-2019-2020 Copy.xls). Dicho archivo se alimenta de las publicaciones recibidas de Platts y Argus diariamente. El archivo también permite computar los precios de los combustibles Bunker C y diésel para propósitos de verificación, a una fecha en específico. También se pueden computar precios para combustibles tales como propano, diésel y gasolina para talleres y transportación, en base a los contratos existentes. Todos los valores arriba mencionados se introducen en el archivo Excel de Pronóstico de Precios en donde los cálculos se efectúan de manera automática.

El cálculo de “Difference Ave.” para Bunker C se realiza para obtener un promedio de variación de los últimos 4 días entre el precio de combustible Marine 0.5%S más su diferencial, y el precio de Residual 1.0%S NY Platts. Dicho promedio se añade a cada precio futuro de Residual 1.0%S NY Platts, para cada mes futuro, y se obtiene un precio futuro para Bunker C Marine 0.5%S con bastante certeza. El mecanismo fue desarrollado en la Oficina de Combustibles. Platts indicó que próximamente incluirán este precio futuro como parte de su ofrecimiento.



Prices Forecast Calculation Template

Date	23-Mar-22
------	-----------

Diesel

month	Platts NY ULSD	Future Price/bbl
Mar-22		\$177.71
Apr-22	4.1148	\$180.52
May-22	3.8173	\$168.03
Jun-22	3.5722	\$157.73
Jul-22	3.4010	\$150.54
Aug-22	3.2865	\$145.73
Sep-22	3.2112	\$142.57

Bunker C

month	Platts 1.0%	Difference Ave.	Future Price/bbl
Mar-22			\$142.23
Apr-22	115.85	28.91	\$144.76
May-22	113.05	28.91	\$141.96
Jun-22	109.83	28.91	\$138.74
Jul-22	106.95	28.91	\$135.86
Aug-22	104.45	28.91	\$133.36
Sep-22	102.35	28.91	\$131.26

LNG San Juan

month	Henry Hub	Future Price/MMBtu
Mar-22	4.568	13.75320
Apr-22	5.232	14.51680
May-22	5.274	14.56510
Jun-22	5.316	13.61340
Jul-22	5.366	13.67090
Aug-22	5.371	13.67665
Sep-22	5.350	13.65250

LNG CS + ECO

month	Henry Hub	Future Price/MMBtu
Mar-22	4.568	10.85320
Apr-22	5.232	11.61680
May-22	5.274	11.66510
Jun-22	5.316	11.71340
Jul-22	5.366	11.77090
Aug-22	5.371	11.77665
Sep-22	5.350	11.75250

Nomenclature

Platts NY = CME Group Platts NY Harbor ULSD Futures - Settlements

Platts 1.0% = CME Group Platts New York Harbor Residual Fuel 1.0% Futures - Settlements

Henry Hub = CME Group Henry Hub Natural Gas Futures - Settlements

Marine 0.5% + 2.88 = Platts 0.5% Dlv US Atlantic Coast Barge + \$2.88 adder per barrel

Platts 1.0% daily = CME Group Platts New York Harbor Residual Fuel 1.0% Futures - Settlements
for specific day on current month

March day	Marine 0.5% + 2.88	Platts 1.0% daily	Difference
18	132.75	107.27	25.48
21	137.72	110.01	27.71
22	141.69	109.91	31.78
23	142.23	111.58	30.65
			0.00
		Average	28.91

	TALLERES A.E.E.		TALLERES A.E.E.	
	GASOLINA	DIESEL	GASOLINA	DIESEL
	(100 a 999 gal)		(1,000 a 10,000 gal)	
FECHA	(\$/GAL)	(\$/GAL)	(\$/GAL)	(\$/GAL)
1	106.0000	107.0000	108.0000	109.0000
01-Oct-18	2.5680	2.7641	2.27476	2.50576
02-Oct-18	2.5664	2.7641	2.27476	2.50576
03-Oct-18	2.5798	2.7952	2.27476	2.50576
04-Oct-18	2.5374	2.7577	2.27476	2.50576
05-Oct-18	2.5331	2.7508	2.27476	2.50576
06-Oct-18	2.5331	2.7508	2.27476	2.50576
07-Oct-18	2.5331	2.7508	2.27476	2.50576
08-Oct-18	2.5302	2.7537	2.27476	2.50576
09-Oct-18	2.5044	2.7823	2.27476	2.50576
10-Oct-18	2.4424	2.7531	2.27476	2.50576
11-Oct-18	2.3522	2.6910	2.27476	2.50576
12-Oct-18	2.3665	2.6783	2.27476	2.50576
13-Oct-18	2.3665	2.6783	2.27476	2.50576
14-Oct-18	2.3665	2.6783	2.27476	2.50576
15-Oct-18	2.3678	2.6812	2.27476	2.50576
16-Oct-18	2.3978	2.6927	2.28846	2.62006
17-Oct-18	2.3257	2.6616	2.28846	2.62006
18-Oct-18	2.2781	2.6499	2.28846	2.62006
19-Oct-18	2.3004	2.6550	2.28846	2.62006
20-Oct-18	2.3004	2.6550	2.28846	2.62006
21-Oct-18	2.3004	2.6550	2.28846	2.62006
22-Oct-18	2.2947	2.6696	2.28846	2.62006
23-Oct-18	2.2204	2.6004	2.28846	2.62006
24-Oct-18	2.2111	2.6014	2.28846	2.62006
25-Oct-18	2.2144	2.6264	2.28846	2.62006
26-Oct-18	2.2215	2.6524	2.28846	2.62006
27-Oct-18	2.2215	2.6524	2.28846	2.62006
28-Oct-18	2.2215	2.6524	2.28846	2.62006
29-Oct-18	2.2304	2.6371	2.28846	2.62006
30-Oct-18	2.2138	2.6119	2.28846	2.62006

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Escalation Factor and Final Price Calculations

Deemed Date:

12/29/21

Date	Platts 0.3%\$ HiPr		Platts 0.7%\$	
	Low	High	Low	High
12/28/21	92.97	92.99	81.24	81.26
12/29/21	93.70	93.72	81.88	81.90
12/30/21	93.95	93.97	82.09	82.11

Averages				
12/28/21	92.98		81.25	
12/29/21	93.71		81.89	
12/30/21	93.96		82.10	

Step 1 - Average:

Average	93.5500	81.7467
	46.775000	40.873333

Step 2 - Interpolation:

87.6483

Step 3 - Final Price:

Site	Scalator	Differential	Final Price
Aguirre	\$87.6483	\$7.7800	\$95.4283
Costa Sur	\$87.6483	\$7.7800	\$95.4283
San Juan - Palo Seco	\$87.6483	\$5.7100	\$93.3583

4th / 5th Ammendments

Aguirre	\$87.6483	\$6.2800	\$93.9283
Costa Sur	\$87.6483	\$6.2800	\$93.9283
San Juan - Palo Seco	\$87.6483	\$4.2800	\$91.9283

PUMA Energy from 11-01-21

Aguirre	\$87.6483	\$2.8800	\$90.5283
Costa Sur	\$87.6483	\$2.8800	\$90.5283
San Juan - Palo Seco	\$87.6483	\$2.8800	\$90.5283

Escalation Factor and Final Price Calculations

Deemed Date: **03/04/22**

Platts 0.5%S Marine Atlantic Coast

Date

03/03/22	131.730	Thursday
03/04/22	142.280	Friday
03/05/22	142.280	Saturday

Step 1 - Average:

Average	138.763
---------	---------

Step 2 - Interpolation:

138.763

Step 3 - Final Price:

Site	Scalator	Differential	Final Price
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PUMA Energy from 11-01-21

Aguirre	\$138.763	\$2.880	\$141.643
Costa Sur	\$138.763	\$2.880	\$141.643
San Juan - Palo Seco	\$138.763	\$2.880	\$141.643

Escalation Factor and Final Price Calculations

Pricing Date

03/20/22

1	3		4	5	6	7	8	9
Date:	Platts NY - ULSD		Platts USGC - ULSD		Argus NY - ULSD		Argus USGC - ULSD	
	Low	High	Low	High	Low	High	Low	High
03/19/22	372.76	372.86	361.01	361.11	376.81	378.81	359.06	360.06
03/20/22	372.76	372.86	361.01	361.11	376.81	378.81	359.06	360.06
03/21/22	397.54	397.64	379.04	379.14	397.34	397.84	377.09	379.59
	372.810		361.060		377.810		359.560	
	372.810		361.060		377.810		359.560	
	397.590		379.090		397.590		378.340	
Average:	381.0700		367.0700		384.4033		365.8200	

Interpolation:	374.0700	375.1117
	187.0350	187.5558

	Escalator	Differential	Final Price
Final Calculation:	157.3282		
Tier 1 up to 180,000 bbl		8.9900	166.3182
Tier 2 >180,000 bbl		8.7000	166.0282
Tier 3 >270,000 bbl		8.5000	165.8282
Contract Extension up to 299,000 bbl		8.0000	165.3282
Contract Extension >300,000 bbl		7.5000	164.8282
NEW CONTRACT (7/22/17)		6.7000	164.0282
ENMIENDA 4 MESES (7/21/19)		14.9000	172.2282
NEW CONTRACT (11/22/19)		10.0000	167.3282
1,200,001 - 3,600,000 bbls		9.5000	166.8282
+ 3,600,000 bbls		9.0000	166.3282
AMENDMENT CONTRACT (11/22/20)		10.0000	167.3282
1,200,001 - 3,600,000 bbls		9.5000	166.8282
+ 3,600,000 bbls		9.0000	166.3282

NOVUM Energy from 11-21-21		
vessel or barge	7.7000	165.0282
tank truck	8.6100	165.9382

Tank Truck			
Peerless	154.4802	7.3747	161.8549

130.2300 125.7300 139.32

127.9800 69.6600

Escalation Factor and Final Price Calculations

Pricing Date **09/13/18**

	Platts USGC - Gasoline		Platts USGC - ULSD	
	Low	High	Low	High
09/13/18	201.99	202.09	218.67	218.77
Average (¢/Gallon)		202.0400		218.7200
Average (\$/Gallon)		2.0204		2.1872
Price Differential		0.4350		0.4350
Final Price		2.4554		2.6222

Resumen Ejecutivo - Precios del Combustible
lunes, 27 de febrero de 2017

	Precio	Cambio día anterior
02/24/17		
Brent	\$56.08	-0.68
WTI	\$53.59	-0.46

Precios del combustible que compra la AEE (\$/bbl)

	No. 6 Fuel Oil			Diesel SJ, CAM, MAY, AG	Gas Natural Costa Sur (\$/MMBtu)
Fecha	SJ/PS	Aguirre	Costa Sur		
12/23/16	#N/A	#N/A	#N/A	#N/A	\$7.5921
01/23/17	#N/A	#N/A	#N/A	#N/A	\$7.8612
02/23/17	#N/A	#N/A	#N/A	#N/A	\$8.5833
Precio más reciente en \$/MMBtu	#N/A	#N/A	#N/A	#N/A	\$8.5833
Pronóstico febrero 2017	\$62.3649	\$64.4349	\$64.4349	\$80.8916	\$8.2222

				Promedio 6 meses previos	Precio GN mensual (\$/MMBTU)	Henry Hub	Precio Final GN (\$/MMBTU)
	0.3% S LP	0.7% S	Promedio				
Jan-14	126.383	101.087	113.74	104.9800			13.6399
Feb-14	129.772	107.667	118.72				13.6399
Mar-14	118.413	108.339	113.38				13.6399
Apr-14	112.749	102.402	107.58	112.0700			14.5089
May-14	107.821	100.966	104.39				15.3967
Jun-14	106.617	99.724	103.17				15.3967
Jul-14	109.228	97.301	103.26	110.1600			15.1598
Aug-14	102.585	91.723	97.15				15.1598
Sep-14	99.435	90.024	94.73				15.1598
Oct-14	89.407	77.858	83.63	101.7100			14.1120
Nov-14	83.404	69.434	76.42				14.1120
Dec-14	69.838	54.787	62.31				14.1120
Jan-15	57.156	46.368	51.76	86.2500			12.1950
Feb-15	66.911	55.904	61.41				12.1950
Mar-15	60.928	49.472	55.20				12.1950
Apr-15	61.658	50.865	56.26	65.1200			9.5749
May-15	61.888	53.905	57.90				9.5749
Jun-15	59.686	52.588	56.14				9.5749
Jul-15	52.307	45.159	48.73	56.4500			8.4998
Aug-15	44.453	37.299	40.88				8.4998
Sep-15							8.4998

Natural Gas Costa Sur				Platts Publication															
Current Month				1 st Publication Next Month															
Month	NO6 FO		Average	Previous 6 Months		NO6 FO		Average	(12.15%F#6+1.125)		P1	Nymex Last Trading Day		P2	Tier 3 50%P1+50%P2	Final Price	Tier 3 x HRNF (HRNF=0.97)	F#6 _{t-11}	(F#6 _{t-11} + 1.29) x HRNF
	0.3% S LP	NO6 FO 0.7% S		0.3% S LP	NO6 FO 0.7% S	0.3% S LP	NO6 FO 0.7% S		Henry Hub										
2015-04	61.658	50.865	56.26																
2015-05	61.888	53.905	57.90																
2015-06	59.686	52.588	56.14																
2015-07	52.307	45.159	48.73																
2015-08	44.453	37.299	40.88																
2015-09	43.396	36.246	39.82																
2015-10	46.363	38.663	42.51	49.96							7.1951	2.563	09/28/15	8.8975	8.0464				
2015-11	45.007	36.384	40.70								7.1951	2.033	10/28/15	8.2880	7.7416				
2015-12	35.599	26.571	31.09								7.1951	2.206	11/25/15	8.4869	7.8411				
2016-01	30.425	22.223	26.32	40.62							6.0603	2.372	12/29/15	8.6778	7.3691				
2016-02	31.363	23.798	27.58								6.0603	2.189	01/27/16	8.4674	7.2639				
2016-03	31.685	26.321	29.00								6.0603	1.711	02/25/16	7.9177	6.9891				
2016-04	34.372	28.756	31.56	32.87							5.1187	1.903	03/29/16	8.1385	6.6287				
2016-05	42.455	35.815	39.14								5.1187	1.995	04/27/16	8.2443	6.6816				
2016-06	46.761	39.409	43.09								5.1187	1.963	05/26/16	8.2075	6.6632				
2016-07	46.157	38.694	42.43	32.78							5.1078	2.917	06/28/16	9.3046	7.2062				
2016-08	46.457	39.860	43.16								5.1078	2.672	07/27/16	9.0228	7.0653				
2016-09	47.484	40.724	44.10								5.1078	2.853	08/29/16	9.2310	7.1694				
2016-10	51.315	44.565	47.94	40.58							6.0555	2.952	09/28/16	9.3448	7.7002				
2016-11	48.557	41.807	45.18								6.0555	2.764	10/27/16	9.1286	7.5921				
2016-12	55.360	49.324	52.34								6.0555	3.232	11/28/16	9.6668	7.8612				
2017-01	58.939	52.577	55.76	45.860							6.6970	3.930	12/28/16	10.4695	8.5833				
2017-02	55.602	51.262	53.43								6.6970	3.391	01/27/17	9.8497	8.2734				
2017-03	50.004	45.913	47.96								6.6970	2.627	02/24/17	8.9711	7.8341				
2017-04	51.213	46.713	48.96	50.440							7.2535	3.175	03/29/17	9.6013	8.4275				
2017-05	49.904	46.101	48.00								7.2535	3.142	04/26/17	9.5633	8.4085				
2017-06	47.747	43.997	45.87								7.2535	3.236	05/26/17	9.6714	8.4625				
2017-07	50.681	46.931	48.81	50.000							7.2000	3.067	06/28/17	9.4771	8.3386				
2017-08	51.856	48.139	50.00								7.2000	2.969	07/27/17	9.3644	8.2822				
2017-09	54.816	51.216	53.02								7.2000	2.961	08/29/17	9.3552	8.2776				
2017-10	56.385	52.610	54.50	49.110							7.0919	2.974	09/27/17	9.3701	8.2311				
2017-11	62.674	58.989	60.83								7.0919	2.752	10/27/17	9.1148	8.1034				
2017-12	62.199	58.589	60.39								7.0919	3.074	11/28/17	9.4851	8.2886				
2018-01	69.153	62.584	65.87	54.590							7.7577	2.738	12/27/17	9.0987	8.4283	8.1755	10.9237	11.8473	
2018-02	65.575	57.758	61.67			69.153	62.584	65.87			7.7577	3.631	01/29/18	10.1257	8.9418	8.6735	10.2272	11.1717	
2018-03	66.570	58.058	62.31			65.575	57.758	61.67			7.7577	2.639	02/26/18	9.9849	8.3714	8.1203	10.3333	11.2746	
2018-04	69.267	61.267	65.27	60.930		66.57	58.058	62.31			8.5280	2.691	03/27/18	9.0447	8.7864	8.5228	10.8242	11.7508	
2018-05	75.688	67.688	71.69			69.267	61.267	65.27			8.5280	2.821	04/26/18	9.1942	8.8611	8.5953	11.8889	12.7835	
2018-06	76.311	68.311	72.31			75.688	67.688	71.69			8.5280	2.875	05/29/18	9.2563	8.8922	8.6254	11.9917	12.8833	
2018-07	78.032	72.228	75.13	66.520		76.311	68.311	72.31			9.2072	2.996	06/27/18	9.3954	9.3013	9.0223	12.4594	13.3369	
2018-08	75.848	67.848	71.85			78.032	72.228	75.13			9.2072	2.822	07/27/18	9.1953	9.2013	8.9253	11.9154	12.8093	
2018-09	77.279	69.279	73.28			75.848	67.848	71.85			9.2072	2.895	08/29/18	9.2793	9.2433	8.9660	12.1526	13.0393	
2018-10	84.927	75.02	79.97	71.590		77.279	69.279	73.28			9.8232	3.021	09/26/18	9.4242	9.6237	9.3350	13.2620	14.1155	
2018-11	77.898	67.929	72.91			84.927	75.02	79.97			9.8232	3.185	10/29/18	9.6128	9.718	9.4265	12.0912	12.9798	
2018-12	69.293	58.988	64.14			77.898	67.929	72.91			9.8232	4.715	11/28/18	11.3723	10.5978	10.2799	10.6368	11.5690	
2019-01	70.989	61.025	66.01	72.880		69.293	58.988	64.14			9.9799	3.642	12/27/18	10.1383	10.0592	9.7574	9.7574	10.9469	
2019-02	75.055	67.371	71.21			70.989	61.025	66.01			9.9799	2.950	01/29/19	9.3425	9.6613	9.3715	11.8093	12.7063	
2019-03	75.819	68.319	72.07			75.055	67.371	71.21			9.9799	2.855	02/26/19	9.2333	9.6067	9.3185	11.9519	12.8446	
2019-04	77.896	70.344	74.12	71.050		75.819	68.319	72.07			9.7576	2.713	03/27/19	9.07	9.4138	9.1314	12.2919	13.1744	
2019-05	77.621	68.828	73.22			77.896	70.344	74.12			9.7576	2.566	04/26/19	8.9009	9.3293	9.0494	12.1426	13.0296	
2019-06	75.445	67.235	71.34			77.621	68.828	73.22			9.7576	2.633	05/29/19	8.978	9.3678	9.0868	11.8308	12.7272	
2019-07	75.802	68.302	72.05	71.330		75.445	67.235	71.34			9.7916	2.291	06/26/19	8.5847	9.1882	8.9126	11.9486	12.8414	
2019-08	70.550	60.265	65.41			75.802	68.302	72.05			9.7916	2.141	07/29/19	8.4122	9.1019	8.8288	10.8474	11.7733	
2019-09	74.830	64.315	69.57			70.550	60.265	65.41			9.7916	2.251	08/28/19	8.5387	9.1652	8.8902	11.5373	12.4425	
2019-10	78.592	68.243	73.42	70.950		74.830	64.315	69.57			9.7454	2.428	09/26/19	8.7422	9.2438	8.9665	12.1758	13.0618	
2019-11	76.516	67.738	72.13			78.592	68.243	73.42			9.7454	2.597	10/29/19	8.9366	9.341	9.0608	11.9619	12.8543	
2019-12	86.069	74.925	80.5			76.516	67.738	72.13			9.7454	2.470	11/26/19	8.7905	9.268	8.9900	13.3499	14.2007	
2020-01	87.024	75.012	81.02	72.180		86.069	74.925	80.5			9.8949	2.158	12/27/19	8.4317	9.1634	8.8885	13.4362	14.2844	
2020-02	72.612	61.638	67.13			87.024	75.012	81.02			9.8949	1.877	01/29/20	8.1086	9.0018	8.7317	11.1327	12.0500	
2020-03	42.313	36.132	39.22			72.612	61.638	67.13			9.8949	1.821	02/26/20	8.0442	8.9696	6.5041	8.7005	6.5041	

2034.235
2034.235
2136.645

Escalation factor calculations

Pricing Date **01/03/17**

Indexes for Ultra Low Sulfur Diesel

	Platts NY		Platts USGC		Argus NY		Argus USGC	
	Low	High	Low	High	Low	High	Low	High
01/02/17	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
01/03/17	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
01/04/17	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

First step: Average

Platts New York	#N/A
Platts US Gulf Coast	#N/A
Argus New York	#N/A
Argus US Gulf Coast	#N/A

Second step: Interpolation

Platts ULSD	#N/A
Argus ULSD	#N/A

Third step: Final calculation

Escalation factor for a delivery commencing on November 2nd, 2016
$= [0.5 (\text{Platts ULSD}) + 0.5 (\text{Argus ULSD})] * 0.42$
#N/A
#N/A

Escalation factor calculations

Pricing Date **02/28/17**

Indexes for No. 6 Fuel Oil

	Platts NY 0.3%S HP		Platts NY 0.7%S	
	Low	High	Low	High
02/27/17	#N/A	#N/A	#N/A	#N/A
02/28/17	#N/A	#N/A	#N/A	#N/A
03/01/17	#N/A	#N/A	#N/A	#N/A

First step: Average

Platts NY 0.3%S HP	#N/A
Platts NY 0.7%S	#N/A

Second step: Interpolation and final calculation

Escalation factor for a delivery commencing on December 6, 2016
= $\left[\frac{1}{2} (\text{Platts NY 0.3\%S HP}) + \frac{1}{2} (\text{Platts NY 0.7\%S}) \right]$
 #N/A
 #N/A

Pricing Date 12/19/16

12/19/16

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Escalation factor and final price calculations

Shipment #902-04-15-SJPS-64

Interpolation between Heating Oil and ULSD

Pricing Date 05/03/16

Date	Platts Oilgram Price Report								Argus US Products							
	New York/Boston Barge				US Gulf Coast Water Borne				New York Waterborne				US Gulf Coast Waterborne			
	No. 2		ULSD		No. 2		ULSD		Heating oil		ULSD		Heating Oil		ULSD	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
05/02/16	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
05/03/16	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
05/04/16	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Average:	Average	
	Index	Sulfur %
Platts No. 2	#N/A	0.5000
Platts ULSD	#N/A	0.0015
Argus No. 2	#N/A	0.5000
Argus ULSD	#N/A	0.0015

Interpolation:	Calculated	
for 0.068% Sulfur	Value	Sulfur %
Platts	#N/A	0.0680
Argus	#N/A	0.0680

Final Calculations:		
50% Platts	#N/A	c/gallon
50% Argus	#N/A	c/gallon
Escalator	#N/A	c/gallon
	#N/A	\$/BBL
Price Differential	8.5000	\$/BBL
Final Price	#N/A	\$/BBL
Final Price as per contract	64.5231	\$/BBL
Difference	#N/A	\$/BBL

NY Harbor ULSD

Futures and Options

GLOBAL CODE ⓘ

HOK2

LAST


3.8053

CHANGE

-0.0120 (-0.31%)

VOLUME

31,125

 Add to portfolio

as of March 24 2022, 01:29pm CT

OVERVIEW

QUOTES

SETTLEMENTS

VOLUME & OI

TIME & SALES

FUTURES

OPTIONS ▾

NY HARBOR ULSD FUTURES - SETTLEMENTS

TRADE DATE **WEDNESDAY 23 MAR 2022** ▾

FINAL DATA ⓘ

Last Updated 24 Mar 2022 01:17:00 PM CT

ESTIMATED VOLUME TOTALS **122,679** PRIOR DAY OPEN INTEREST TOTALS **228,666**

MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME	PRIOR DAY OI
APR 22	3.7849	4.1284	3.7659	4.0825A	+ .2506	4.1148	26,952	31,645
MAY 22	3.5555	3.8304	3.5460	3.7826	+ .2215	3.8173	41,837	55,929
JUN 22	3.3670	3.5804	3.3534	3.5366B	+ .1926	3.5722	23,094	35,029
JLY 22	3.2267	3.4066	3.2260A	3.3733B	+ .1638	3.4010	8,904	18,049
AUG 22	3.1402	3.2904	3.1402	3.2598A	+ .1399	3.2865	5,083	10,804
SEP 22	3.1063	3.2138B	3.0840	3.1891A	+ .1251	3.2112	5,340	12,529
OCT 22	3.0955	3.1503	3.0909	3.1463B	+ .1115	3.1507	2,311	9,777
NOV 22	3.0465	3.0900B	3.0465	3.0904B	+ .0986	3.0937	1,718	8,871
DEC 22	2.9490	3.0464	2.9440	3.0249A	+ .0897	3.0443	4,518	17,628

New York Harbor Residual Fuel 1.0% (Platts)

Futures

GLOBEX CODE ⓘ

LAST

CHANGE

VOLUME

MMH2

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 Add to portfolio

as of March 24 2022, 01:25pm CT

NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) FUTURES - SETTLEMENTS

TRADE DATE **WEDNESDAY 23 MAR 2022** ▼

FINAL DATA ⓘ

Last Updated 24 Mar 2022 12:45:00 PM CT

ESTIMATED VOLUME TOTALS -

PRIOR DAY OPEN INTEREST TOTALS **395**

MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME	PRIOR DAY OI
MAR 22	-	-	-	-	+1.67	111.58	0	250
APR 22	-	-	-	-	+5.57	115.85	0	145
MAY 22	-	-	-	-	+5.80	113.05	0	0
JUN 22	-	-	-	-	+5.25	109.83	0	0
JLY 22	-	-	-	-	+4.65	106.95	0	0
AUG 22	-	-	-	-	+4.05	104.45	0	0
SEP 22	-	-	-	-	+3.67	102.35	0	0
OCT 22	-	-	-	-	+3.40	100.45	0	0

New York Harbor Residual Fuel 1.0% (Platts)

Futures

GLOBEX CODE ⓘ

MMH2

LAST

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CHANGE

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VOLUME

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 Add to portfolio

as of March 24 2022, 01:27pm CT

NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) FUTURES - SETTLEMENTS

TRADE DATE **TUESDAY 22 MAR 2022** ▼

FINAL DATA ⓘ

Last Updated 24 Mar 2022 12:45:00 PM CT

ESTIMATED VOLUME TOTALS 25

PRIOR DAY OPEN INTEREST TOTALS 370

MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME	PRIOR DAY OI
MAR 22	-	-	-	-	-.10	109.91	0	250
APR 22	-	-	-	-	-.22	110.28	25	120
MAY 22	-	-	-	-	-.38	107.25	0	0
JUN 22	-	-	-	-	-.37	104.58	0	0
JLY 22	-	-	-	-	-.33	102.30	0	0
AUG 22	-	-	-	-	-.25	100.40	0	0
SEP 22	-	-	-	-	-.25	98.68	0	0
OCT 22	-	-	-	-	-.33	97.05	0	0

New York Harbor Residual Fuel 1.0% (Platts)

Futures

GLOBEX CODE ⓘ

LAST

CHANGE

VOLUME

MMH2

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as of March 24 2022, 01:28pm CT

NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) FUTURES - SETTLEMENTS

TRADE DATE **MONDAY 21 MAR 2022** ▼

FINAL DATA ⓘ

Last Updated 24 Mar 2022 12:45:00 PM CT

ESTIMATED VOLUME TOTALS —

PRIOR DAY OPEN INTEREST TOTALS 370

MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME	PRIOR DAY OI
MAR 22	-	-	-	-	+2.74	110.01	0	250
APR 22	-	-	-	-	+7.02	110.50	0	120
MAY 22	-	-	-	-	+6.15	107.63	0	0
JUN 22	-	-	-	-	+5.45	104.95	0	0
JLY 22	-	-	-	-	+4.98	102.63	0	0
AUG 22	-	-	-	-	+4.57	100.65	0	0
SEP 22	-	-	-	-	+4.30	98.93	0	0
OCT 22	-	-	-	-	+4.10	97.38	0	0

New York Harbor Residual Fuel 1.0% (Platts)

Futures

GLOBEX CODE ⓘ

LAST

CHANGE

VOLUME

MMH2

-

-

-

 Add to portfolio

as of March 24 2022, 01:28pm CT

NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) FUTURES - SETTLEMENTS

TRADE DATE FRIDAY 18 MAR 2022 ▾

FINAL DATA ⓘ

Last Updated 24 Mar 2022 12:45:00 PM CT

ESTIMATED VOLUME TOTALS 20

PRIOR DAY OPEN INTEREST TOTALS 350

MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME	PRIOR DAY OI
MAR 22	-	-	-	-	+ .57	107.27	0	250
APR 22	-	-	-	-	+1.35	103.48	20	100
MAY 22	-	-	-	-	+1.55	101.48	0	0
JUN 22	-	-	-	-	+1.65	99.50	0	0
JULY 22	-	-	-	-	+1.65	97.65	0	0
AUG 22	-	-	-	-	+1.68	96.08	0	0
SEP 22	-	-	-	-	+1.65	94.63	0	0
OCT 22	-	-	-	-	+1.63	93.28	0	0

Henry Hub Natural Gas

Futures and Options

GLOBAL CODE ⓘ

NGJ2

LAST

5.410

CHANGE

+0.178 (+3.40%)

VOLUME

65,504

 Add to portfolio

as of March 24 2022, 01:15pm CT

HENRY HUB NATURAL GAS FUTURES - SETTLEMENTS

TRADE DATE **WEDNESDAY 23 MAR 2022** ▼

FINAL DATA ⓘ

Last Updated 24 Mar 2022 12:32:00 PM CT

ESTIMATED VOLUME TOTALS 255,659 PRIOR DAY OPEN INTEREST TOTALS 1,085,676

MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME	PRIOR DAY OI
APR 22	5.147	5.330	5.092	5.129A	+ .045	5.232	75,001	34,343
MAY 22	5.184	5.364	5.135	5.172A	+ .047	5.274	66,145	224,362
JUN 22	5.214	5.400	5.184A	5.215A	+ .048	5.316	16,094	70,881
JLY 22	5.274	5.450	5.229	5.266B	+ .050	5.366	14,696	90,963
AUG 22	5.279	5.449	5.248	5.272B	+ .051	5.371	6,647	43,741
SEP 22	5.255	5.424B	5.221A	5.216A	+ .051	5.350	5,603	76,529
OCT 22	5.268	5.443	5.231	5.263B	+ .052	5.362	17,210	78,387
NOV 22	5.343	5.506	5.300A	5.324B	+ .050	5.423	3,302	43,312
DEC 22	5.480	5.640B	5.433A	5.462B	+ .053	5.562	3,669	45,958

INFORME DE PRECIOS DE COMBUSTIBLES CONTRATOS VIGENTE

[illegible]

OILGRAM PRICE REPORT

Volume 100 / Issue 56 / March 23, 2022

US crude oil inventories fall amid strong exports, steady refinery demand

- Commercial crude stocks down 2.51 million barrels
- Exports strongest since July 2021
- Gasoline stocks fall as exports surge

US crude oil inventories saw a counter-seasonal draw in the week to March 18, US Energy Information Administration data showed March 23, amid rising refinery demand and a sharp uptick in exports.

Total US commercial crude stocks fell 2.51 million barrels to 413.4 million barrels, EIA reported, leaving stocks 12.5% behind the five-year average for this time of year.

The draw, while running counter to a roughly 1.7 million-barrel build averaged over the past five years, was in line with recent market expectations. American Petroleum Institute data released late March 22 showed US crude oil stocks fell 4.28 million barrels in the week to March 18.

Notably, inventories at the NYMEX delivery point of Cushing, Oklahoma, climbed for a second straight week, rising 1.24 million barrels to a five-week-high 25.24 million barrels.

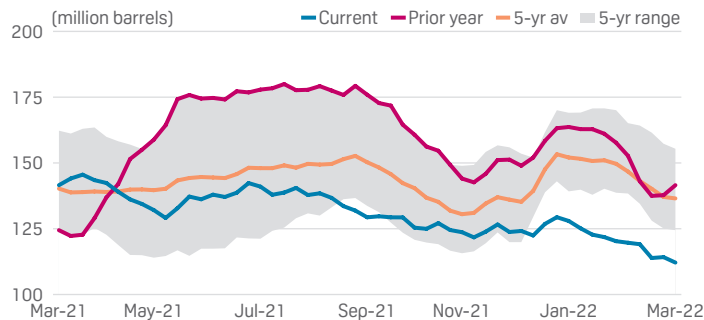
But US Gulf Coast inventories plunged 6.56 million barrels to a five-week-low 228.05 million barrels as exports jumped 30% week on week to 3.84 million b/d. US crude exports were last higher during the week ended July 9, 2021.

This uptick comes amid a marked improvement in the economics for moving for US crude abroad.

The arbitrage incentive for moving WTI MEH into Singapore versus Malaysian Tapis crude has averaged \$10.33/b to date in March, according to S&P Global Commodity Insights data, up from an average

[\(continued on page 17\)](#)

US DISTILLATE STOCKS LOWER AMID STRONG DEMAND



MARKET ANALYSIS

International crude	2
Americas crude	5
Gasoline	6
Diesel	8
Jet	9
Resid	10
Feedstocks	11
Gas liquids	11
Tankers	12
Refinery updates	17

NEWS HEADLINES

OIL FUTURES: Crude rallies as market eyes new sanctions on Russia, US crude draw

- US crude stocks see counter-seasonal draw
- EU mulls sanctions on Russian energy
- Putin demands gas payments in rubles

Crude futures pushed higher March 23 as the market weighed a US inventory draw and the potential for further disruptions to Russian supply.

UK joins European countries cutting fuel duty in response to surging pump prices

- Measure comes amid tightness in European fuel, feedstock markets
- Self-sanctioning of Russian oil products adding to pressure at pump
- UK tax cut on fuel largest on record, according to government

The UK has become the latest European country to cut its fuel duties in a bid to tame record high pump prices in the wake of Russia's invasion of Ukraine.

Argentinian refiners seek more local crude as costly diesel, gasoline imports surge

- Diesel, gasoline imports have doubled this year
- Oil producers are exporting more supplies on higher international prices
- Refiners have 10%-15% idle capacity

Argentina's refiners are in talks with oil producers to increase crude deliveries to their plants as rising domestic diesel and gasoline demand combined with difficulties in importing supplies of these products raise concerns of shortages, according to a senior executive at a leading oil refiner.

MARKET ANALYSIS

International crude

Russia says Kazakh CPC crude export disruption could last two months

Russia warned March 23 that disruption to exports of Kazakhstan's CPC crude grade from the Russian port of Novorossiisk could last two months after all three loading points were shut following storm damage.

Speaking in Moscow, Russian Deputy Prime Minister Alexander Novak said repairs to the vital crude artery, which accounts for most of Kazakhstan's exports, "will take some time," with experts saying "around one-and-a-half to two months."

The CPC pipeline consortium first begun shutting down the offshore loading facilities March 22 citing structural and pipe damage at two of the three 'single-point mooring' facilities. So far, no oil spillage has been observed, the consortium said.

Kazakh crude exports already faced difficulties from security risks in the Black Sea resulting from the war in Ukraine, and sanctions against Russia. The outage is adding to market tightness, with Russia's own crude exports being shunned by a number of countries and companies.

The price discount for CPC crude since Russia's invasion of Ukraine narrowed slightly March 22 but remains close to \$10/b.

The US Treasury has exempted CPC exports from sanctions against Russia on the grounds that most of the CPC Blend are Kazakh rather than Russian origin. Loadings of CPC crude, more than 90% of it derived from Kazakhstan, totaled over 1.5 million b/d in February.

Kazakhstan said March 23 it was looking for alternative routes to export its CPC Blend.

The CPC pipeline consortium confirmed it had stopped loadings from all three mooring points in the port in the northeast of the Black Sea.

CPC Director-General Nikolai Gorban said repairs could be held up by a lack of access to parts — which foreign companies were refusing to supply — as well as the weather while appearing to give a somewhat shorter time schedule than Novak.

Naming a number of supply companies, Gorban said "these foreign suppliers, which delivered to us up to now, have officially informed us that they are refusing to cooperate further and there will be no further deliveries. We have a normal stock of supplies but they are insufficient if such events develop."

The loading reduction envisaged "this month and next month would be three to five times — for March and April," Gorban said. "Currently loadings are completely halted for objective reasons: the unusual storms. We discovered damage that prevents further safe use of the single-point moorings," he said.

The light, relatively sweet CPC grade is distinct from Russian mainstay Urals and often trades at a premium to Urals. However, it is also known for high mercaptan content, which complicates matters for buyers.

The operator of the CPC pipeline from Kazakhstan said March 22 that two of the three offshore loading facilities at Novorossiisk had

DATA INSIDE THIS ISSUE

EIA weekly summary, Mar 23 (PGA page 95).....	19
Asia, Mar 23.....	20
China, Mar 23 (PGA page 2010)	20
Fujairah, FOB, Mar 23 (PGA page 2018)	20
Arab Gulf, FOB, Mar 23 (PGA page 2004)	20
Asia product premium/discount assessments	20
Platts Index, Mar 23 (PGA page 115)	20
European bulk, Mar 23	21
West Africa products (\$/mt), Mar 23	21
Renewable fuels (\$/mt), Mar 23 (PGA pages 1414, 483 and 2414).....	21
European feedstocks and blendstocks.....	21
New York, Mar 23 (PGA page 152).....	22
USAC CPL Linden*, Mar 23 (PGA page 410).....	22
U.S. Buckeye pipeline, Mar 23 (PGA page 310).....	23
Chicago pipeline, Mar 23 (PGA page 160).....	23
Group Three, Mar 23 (PGA page 160).....	23
Marine Fuel (PGA page 30)	23
U.S. Gulf Coast, Mar 23.....	24
U.S. Gulf Coast pipeline cycles, Mar 23 (PGA page 156)	25
West Coast pipeline, Mar 23 (PGA page 158).....	26
West Coast waterborne, Mar 23 (PGA page 158)	26
Latin America, FOB, Mar 23 (PGA page 164).....	27
Trinidad product postings (PGA page 466).....	27
Gas liquids (¢/gal), Mar 23 (PGA page 780)	27
Asia Pacific/Middle East spot crude assessments (\$/barrel), Mar 23	28
International, Mar 23	29
Asia (\$/barrel), Mar 23 (PGA page 2210)	29
North Sea, Mar 23 (PGA page 1212)	29
West Africa, Mar 23 (PGA pages 1230 and 1232).....	29
London, Mar 23 (PGA page 1214).....	30
Mediterranean, Mar 23 (PGA pages 1220, 1222, 1234).....	30
Canada, Mar 23 (PGA page 230)	30
Platts Euro denominated crude oil assessments (€/barrel) (PGA page 1252).....	30
United States (\$/barrel), Mar 23 (PGA pages 210, 214 & 230).....	31
US domestic crude assessments London close	31
US crude assessments Singapore close	31
Canadian spot crude assessments, Mar 23.....	32
Crude oil postings.....	32
Delivered-Asia spot crude assessments (\$/barrel) (PGA page 2238)	32
Latin America crude (\$/barrel), Mar 23 (PGA page 280).....	32
Daily OPEC basket price (\$/barrel) (PGA page 207)	32
Spot tanker rates, Mar 23.....	33
Platts futures assessments Singapore MOC, Mar 23 (PGA page 703).....	33
Platts futures assessments, Mar 23	33
Futures settlements, Mar 23	34
Five-Day Rolling Averages, five days ending March 23.....	35
US wholesale posted prices effective Mar 23.....	36
US wholesale posted prices effective Mar 19	37
Platts Analytics Weekly Feeder Crudes: March 14 - March 18, 2022	38
Platts Analytics Monthly Average Yields & Netbacks, February 2022.....	41
Weekly asphalt cement assessments, Mar 18 (PGA page 580)	43
Monthly spot lube assessments, February 2022 (PGA page 1146)	43
US crude pipeline averages 26Jan22 - 25Feb22.....	44
European monthly averages, February 2022	45
Saudi Arabian Official Selling Prices (\$/barrel), Mar 7	46

suffered storm damage. The third facility has still to be examined, with the weather hampering inspection efforts, but has been shut in the meantime.

Gorban said pumping of crude from Kazakhstan through the pipeline to Novorossiysk continued at a reduced level for the time being, but there was storage capacity at the port sufficient only until the end of March 24.

Separately, Kazakhstan's energy ministry said it was "consulting with CPC on the time frame for renewing operation of the sea terminal. Meanwhile, the potential is being examined for an increase in shipments of crude for export via alternative routes."

Chevron, the lead investor in Kazakhstan's highest-producing field Tengiz, said in an emailed comment it was "assessing the situation."

The Tengiz operating consortium is currently completing a \$45 billion expansion project intended to lift crude output to 850,000 b/d.

Alternative routes

BP has said there is capacity in Azerbaijan's Baku-Tbilisi-Ceyhan pipeline that can be used for shipping Kazakh crude along the route to Turkey's Mediterranean coast, but shipping crude across the Caspian for loading into the BTC pipeline is seen as logistically arduous. One Mediterranean oil trader, speaking to S&P Global Commodity Insights, said of the search for alternative routes, "given the volumes, it's very challenging and also the quality of the grade, due to the mercaptan content."

Another trader, addressing the possibility of sending Kazakh crude through Azerbaijan, said, "on paper, it has been done before in small batches, but to redirect the entire thing would be completely different... It all depends for how long and how many single-point moorings are down."

Kazakhstan also has land-based alternatives for shipping its crude — oil can be shipped through Russia's Transneft network, and a 2,200 km pipeline runs from the Caspian Sea to China's western border, but both routes are likely to entail significant impairments to the pricing of CPC Blend.

More Middle Eastern sour crude moving into Europe

Russian Urals crude remained at record low values amid growing international pressure on Russian energy exports, sources said March 23, adding Asian buyers continued to dominate the market.

According to Asian sources, Indian Oil Corp. took another 3 million barrels of Russian medium sour Urals for May loading, part of the redrawing of global crude oil flows as the EU considers a phase-out of Russian barrels.

In that vein, state-owned Chinese refineries were becoming more active in the Urals market, sources said.

"I think it is becoming more politically palatable [domestically]," a Urals trader said, adding that, elsewhere, more Middle Eastern grades were being placed into Europe.

"The story with Russia is a game-changer. It is not a supply disruption that lasts a few months and then it is gone," said Pierre Andurand, founder and CIO of energy hedge fund Andurand Capital.

"We are not going back to normal business in a few months, and I think we are losing the Russian supply on the European side forever

and we have got to plan for that."

Meanwhile, with Asian sour crude buyers taking Urals, Middle Eastern grades have seen levels plummet to try to compete.

"Middle Eastern grades have softened considerably," an Indian refiner said, adding that was attracting European buyers looking to replace Urals.

In related news, Russian deputy prime minister Alexander Novak March said oil trading needed to switch to national currencies as the dollar and euro had become less reliable.

That followed Russian President Vladimir Putin telling Gazprom to sell gas to Europe in rubles and threatening to extend the measure to other exports.

Nigeria's NNPC raises most OSPs for April-loading crudes

Nigerian National Petroleum Corp. has increased the official selling prices for most of its crude grades loading in April, the company said March 23.

Leading export grades Qua Iboe and Bonny Light saw increases to \$2.37/b and \$2.02/b above Dated Brent respectively, according to NNPC. Bonny Light's OSP increased 9 cents/b on March while Qua Iboe's OSP increased 21 cents/b.

OSP for Forcados, a prominent Nigerian export grade rich in middle distillates ticked up 30 cents/b on March to \$2.72/b above Dated Brent. Escravos' OSP increased 36 cents/b to \$2.89/b above Dated Brent.

Eight grades will have their OSPs lowered, including Eremor which will see the largest decrease of \$5.02/b to an \$11.90/b deficit to Dated Brent. EA blend will also see a sizeable reduction of \$2.37/b to \$2.54/b above Dated Brent.

Okoro's OSP will see a rise of \$2.79/b to a \$6.26/b premium to Dated Brent, the largest increase for a second consecutive month. Oyo's OSP will rise \$1.05/b to a \$5.29/b premium to Dated Brent. For the previous trade cycle, NNPC had raised all March-loading OSPs.

India's February crude imports fell 8.6%

India imported 17.59 million mt, or an average 4.6 million b/d, of crude in February, down 8.6% from January, provisional data from the country's Petroleum Planning and Analysis Cell showed March 23.

The lower month-on-month imports by Asia's second-biggest crude buyer was due to high global prices, triggered by the tensions between Russia and Ukraine.

The imports in February were the lowest since October.

In February, the imports were 15.5% higher year on year as the domestic demand in the year-ago month was weak due to the coronavirus pandemic.

The higher on-year imports in February was due to improvement in economic activities in Asia's third-largest economy after the third wave of coronavirus that struck early this year waned.

In February, India's oil product demand showed a 5.4% rise year on year, reflecting a recovery in industrial and consumer demand after the third wave of the coronavirus around the beginning of the new year.

Oil demand fell 0.2% in February over January as a fall out of higher global crude prices due to the tension between Russia and Ukraine.

Asia's second-biggest crude importer, India meets around 85% of its demand via overseas purchase with the Gulf countries sharing 60%

towards the domestic demand.

Analysts said the month-on-month crude imports in March could be lower as a fall out of higher global prices due to Russia's military war in Ukraine starting Feb. 24.

For the January-February period, India's crude imports rose 5.8% year on year to 36.85 million mt, or 4.6 million b/d, as domestic demand for oil products recovered with improvement in economic activities after the third wave of the pandemic.

The strong trend in crude imports on an annual basis may continue in the next couple of months as Indian refiners contracted Russian crude at discounted prices.

Iraq, Saudi Arabia and the United Arab Emirates were the top three crude suppliers to India in February, followed by the US, Kuwait, Canada and Nigeria, according to trade sources.

Dubai complex drops lower

The Middle East sour crude complex dropped sharply March 23, reflecting weaker buying interest for the region's crude as the current trading cycle nears its end.

S&P Global Commodity Insights assessed May cash Dubai at a premium of \$7/b to same-month Dubai futures, down 60 cents/b from the previous day, while May cash Oman was assessed at a premium of \$7.25/b, dropping 40 cents/b.

Refiners in Asia are likely to seek fewer Middle East crude cargoes as crude prices move upwards, sources said.

This could pressure the Middle East sour complex in the final stretch of the May-loading cycle and leave cargoes unsold, especially for grades such as Murban, and Upper Zakum, traders said.

"Seems like some cargoes still left. This month is pretty quiet and slow," a trader with a North Asian refinery said.

Demand for Oman crude was likely to be impacted, with buyers such as India and China actively seeking Russian Urals, a likely replacement for Oman crude, sources said.

Market participants are eyeing the outcome of two tenders from Indian Oil Corp. and MRPL, with sources suggesting that the refiners could buy more discounted Russian crude.

In the Platts Market on Close assessment process on March 23, eight Dubai partials were traded.

The partials were traded between PetroChina, Reliance and TotalEnergies on the sell side, and Vitol and Gunvor on the buy side.

This brings the total number of Oman and Dubai partials traded in March to 105.

Russia's first spot Sakhalin Blend tender since war likely unawarded

The first spot tender for Far East Russia's light distillate-rich Sakhalin Blend crude since the start of the Russia-Ukraine war may not have been awarded due to a lack of bids, market sources told S&P Global Commodity Insights March 22, as buying interest for Russian crudes continue to dissipate.

However, when contacted, a representative of Sakhalin Energy declined to comment on the matter.

Russia's Sakhalin Energy had offered three 730,000-barrel cargoes of the naphtha rich Sakhalin Blend, which typically has an API gravity of 45.5 and sulfur content of 0.16%, for June delivery via a tender which closed on March 22, traders said. The delivery dates were reportedly

S&P Global Platts

OILGRAM PRICE REPORT

ISSN: 0163-1292

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Oilgram Price Report is published every business day in New York and Houston by Platts, a division of S&P Global, registered office: 55 Water Street, 37th Floor, New York, N.Y. 10038.

Officers of the Corporation: Richard E. Thornburgh, Non-Executive Chairman; Doug Peterson, President and Chief Executive Officer; Ewout Steenberg, Executive Vice President, Chief Financial Officer; Steve Kemps, Executive Vice President, General Counsel

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June 1-7, June 10-16 and June 19-25.

A representative of Sakhalin Energy declined to comment on the matter.

"Hearing Sakhalin Blend tender is unawarded, and heard no bids," a Singapore-based crude oil trader said.

Another Far East Russian grade, the middle distillate-rich Sokol crude oil, had suffered a similar fate.

Earlier in March, India's ONGC was heard to have not awarded its tender for a 700,000-barrel cargo of Sokol crude for May 2-8 loading after it failed to receive any bids for the tender, traders said.

There were expectations that buyers in China and India would buy these Russian barrels, but industry sources noted that very few buyers were willing to commit and undertake risks around logistics and payments.

"We cannot bid in [Sakhalin Blend] tender now due to company policy," a China-based crude oil trader said.

Buyers in China have the option to purchase crude in Yuan, or pay via the Delivered Duty Unpaid incoterm to route Russian cargoes to China, another Singapore-based crude oil trader said.

In a DDU transaction, the seller will deliver the cargoes once they are made available at an agreed upon location in the buyer's country, providing much more assurance for the buyer given the volatile geopolitical climate.

"There is no direct outlet for Sakhalin Blend, they need to find someone to place the cargoes and Russia seems to be more open to alternative payments now," the second Singapore-based trader said.

"Although India is not the mainstream buyer for Sakhalin Blend, they seem more open to buy Russian crudes than China now," the trader added.

Last month, four similar-sized cargoes of May-delivery Sakhalin Blend were heard sold, via tenders, to South Korean and Chinese buyers at premiums in the low-\$7s/b to Platts front month Dubai assessments, CFR North Asia, traders said.

China's bitumen blend imports slow to trickle

China's appetite for bitumen blend has slowed to a trickle in March, despite cargoes being offered at steep discounts to ICE Brent Futures, as domestic demand for asphalt has weakened sharply, market sources said March 22.

Demand for bitumen blend has remained thin in recent weeks, with few deals heard done for the feedstock, sources told S&P Global Commodity Insights.

Over January-February, China's bitumen blend imports totaled 3.2 million mt, down 10% year on year, latest General Administration of Customs data showed.

Offers for bitumen blend in March were heard at a discount of around \$22/b to ICE Brent Futures on a DES Shandong basis, down further from discounts of around \$20-\$21/b earlier in the year, trade sources said.

"Offers for other crudes have been pretty high over the past week due to the tight supply in the international market, but bitumen blend is still in deep discount, due mainly to the weak demand for asphalt," one trade source said.

Only a few cargoes have been purchased at a discount of around

\$22/b, by regular buyers that produce asphalt, but demand for asphalt has not picked up, according to sources.

Bitumen blend is usually used by asphalt plants as a feedstock for paving roads. It can also be an option for independent refineries that have no crude import quotas.

While China's bitumen blend imports did edge up 1.8% month on month to 1.62 million mt in February, this was still down 14.3% year on year, the GAC data showed.

Almost all the imports were from traditional supplier Malaysia, the same as in December and January, the GAC data showed.

China's independent refineries, especially those in Shandong province, were the major buyers, despite a consumption tax imposed on bitumen blend since June 12, 2021 adding to the import cost.

With a lower crude import quota volume allocated in the first batch of 2022 to China's independent refineries, it is likely that those independent refineries will continue to import bitumen blend as a supplement feedstock, market sources said.

Beijing allocated 107.4 million mt of crude import quotas in the first batch for 2022, down 9.4% from the same batch in 2021, and five independent refineries received no quota allocation.

—Staff

Americas crude

US crude oil exports surge; South Korea top buyer

US exports of crude oil spiked more than 900,000 b/d higher for the week to March 18, Energy Information Administration data showed March 23.

US crude oil exports averaged 3.844 million b/d in the week to March 18, up 908,000 b/d from the prior week, EIA said in its Weekly Petroleum Status Report. That is the highest weekly figure since early July 2021 and nearly 1.4 million b/d more than during roughly the same week last year.

So far in 2022, US oil exports have averaged 2.799 million b/d, just under the 2.876 million b/d average for about the same time period in 2021.

Late last week, data from Platts cFlow trade-flow analytics software pegged US exports for the week to March 18 at 3.670 million b/d, up 1.41 million b/d from Platts cFlow data for the prior week.

The Platts cFlow data pegs US average weekly crude oil exports in 2022 at 3.126 million b/d, slightly higher than the data from the EIA's weekly report.

Disparities in the Platts cFlow and EIA data are typically the result of differences in methodology. While Platts cFlow tracks vessel movement, the EIA relies on export customs receipts.

According to Platts cFlow data, ports in South Korea were the most popular destination for US crude oil exports for the week to March 18, with about 3.969 million barrels sailing in that direction. Thailand also was a popular destination for US exports at 2.044 million barrels last week, while ports in Europe including the Netherlands, Spain, Italy and France all took in significant volumes as well.

Exports to customers in Europe could pick up in the coming weeks and months as governments in the region turn away from exports of

Russian crude and search for alternative suppliers.

Meanwhile, some customers in Asia are reportedly being swayed by the deep discount for Russian Urals. S&P Global reported March 22 that several Chinese state-owned refiners have returned to the Russian spot market to buy May-loading Urals, which are currently running at a discount of more than \$30/b to Dated Brent.

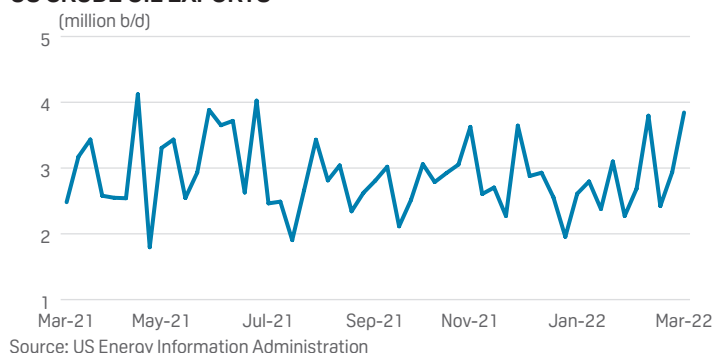
On March 22, Platts American GulfCoast Select was assessed 18 cents/b lower at \$113.70/b, up about \$15 from a week earlier but still down from March 8, when its outright price was assessed at an all-time record \$126.91/b.

Meanwhile, the Brent/West Texas Intermediate swaps spread was assessed at \$3.54/b on March 22, widening from \$2.74/b a week earlier.

A wider Brent-WTI spread typically means US oil exports become more competitive in the global market.

But steep backwardation continues to challenge the economics of US exports to longer-haul destinations such as Asia. The M1/M6 spread on the NYMEX crude contract, which had narrowed to \$9.09/b on March 16, has since blown out and was at \$13.73/b on March 22.

US CRUDE OIL EXPORTS



Canadian crude-by-rail exports declined 14% in 2021: CER

Canada's exports of crude oil by rail dropped last year as additional pipeline capacity came online and shipments by train became economically unviable for most players.

Crude-by-rail exports from Canada averaged 145,700 b/d in 2021 compared with an average of 170,365 b/d in 2020, data released by the Canada Energy Regulator March 22 showed. The exports had reached a high of 411,991 b/d in February 2020 before the coronavirus pandemic cut demand, and they fell to as low as 38,867 b/d in July 2020. Canada exported 131,497 b/d by rail in January, according to the most recent government statistics available, up 273 b/d from 131,224 in December.

While Canadian crude and condensate production recovered from the pandemic, additional pipeline capacity also entered service. In October, Enbridge's Line 3 replacement project into the US expanded to 760,000 b/d from 390,000 b/d, effectively ending the Canadian pipeline bottleneck into the US. Also, the new Capline Pipeline reversal project entered service at the beginning of January, moving more than 100,000 b/d of Canadian crude to the Louisiana Gulf Coast.

Additional pipeline capacity has narrowed the price spread for heavy Canadian crude near the source in Alberta and on the USGC. In February of 2020, the price spread for the heavy Western Canadian Select blend in Hardisty, Alberta, and on the USGC reached as high as \$21/b, according to data from S&P Global Commodity Insights. The

spread was assessed at \$7.25/b March 22, far below the \$13/b level traders say is needed to incentivize rail.

S&P Global Commodity Insights projects crude-by-rail exports to potentially increase in the summer, after maintenance projects are completed. Canadian crude and condensate production is forecast to grow from almost 4.8 million b/d at the end of 2021 to more than 5.2 million b/d by end-2022 and nearly 5.5 million b/d at the end of 2023.

WCS in Hardisty was last assessed at WTI CMA minus \$11.20/b, and in Nederland, Texas, at WTI CMA minus \$3.95/b.

—Staff

Gasoline

High prices may dent Japan's demand recovery

Japan's domestic gasoline demand is expected to rise after the government lifted COVID-19-led movement restrictions in all 18 prefectures March 21, but surging retail prices are a worry and could dent some of that growth, market sources said March 23.

The country's new COVID-19 cases slumped 81% from a peak on Feb. 5 to 20,231 March 22, according to Japanese public broadcaster NHK. This is the first time that Japan has not been under any pandemic-related curbs since early January.

"With the lifting of the priority measures, gasoline demand will recover gradually but as retail prices remain high, demand will not increase significantly," a refiner source said.

Japan's gasoline demand in March is expected to fall 7% year on year and remain 6% below the pre-pandemic level, the country's largest refiner ENEOS Holdings Chairman Tsutomu Sugimori said March 22.

"After all, [consumers] would refrain from buying [gasoline] from rising prices, generally speaking," Sugimori said.

Subsidy effect

The Japanese government began providing fuel subsidies, covering gasoline, kerosene, gasoil, and fuel oil, to refiners and oil product importers from end-January, as part of its efforts to alleviate the effect of rising oil prices on economic recovery from the pandemic.

Spot and retail gasoline prices have surged in the wake of the Russia-Ukraine war, dulling the effect of the subsidies.

"The current spot prices are still higher compared to last year, and this situation is expected to continue, though government's subsidies have been provided," a trader based in Tokyo said. "It will be difficult for gasoline demand in April to exceed the results for the same month of the previous year."

Japan's domestic spot average rack price for gasoline in Chiba soared to Yen 80,966/kl, or \$106.3/b, in the month through March 22, up from an average of Yen 59,213/kl, or \$77.8/b, in March 2021, data from S&P Global Commodity Insights showed.

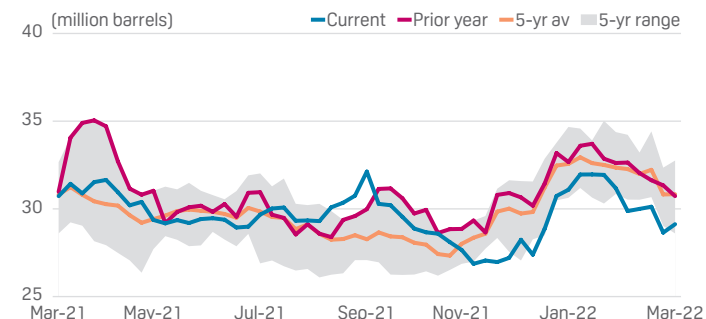
The country's national average retail price of regular gasoline increased for the 10th straight week to Yen 175.2/liter (\$1.48/liter) March 14, reaching the highest level in 13 years after rising Yen 0.6/liter week on week, the Oil Information Center said March 16.

"It is true that subsidies have curbed retail price hikes. However, gasoline demand will continue to be curtailed, as consumers are

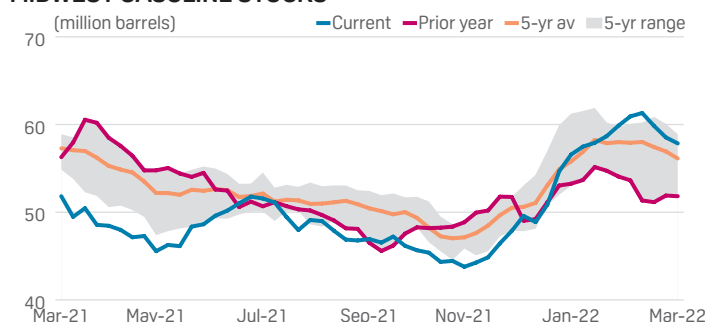
less likely to feel the benefits of the subsidies,” a trader based in Osaka said.

Refiners use the government’s subsidies to curb increases in weekly wholesale prices of gasoline, kerosene, gasoil, and fuel oil,

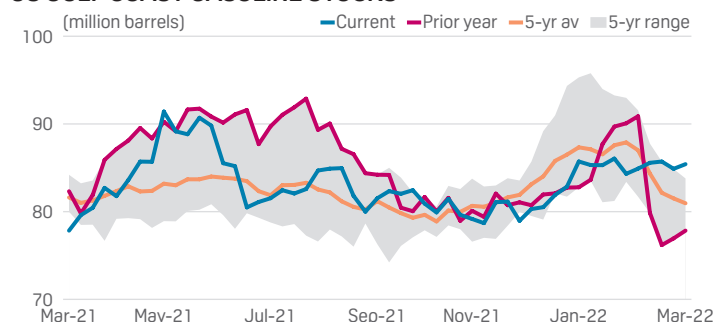
USWC GASOLINE STOCKS



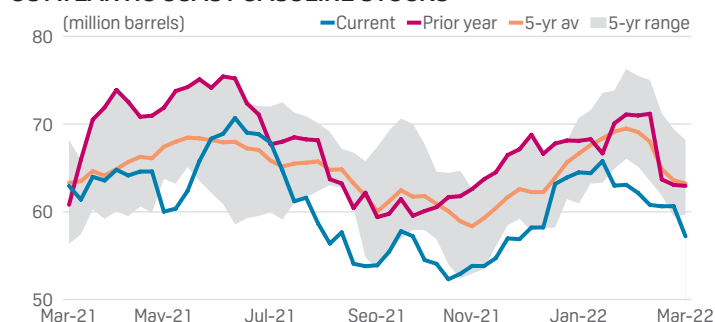
MIDWEST GASOLINE STOCKS



US GULF COAST GASOLINE STOCKS



US ATLANTIC COAST GASOLINE STOCKS



while trading houses deduct subsidies from the selling prices of imported oil products.

US East Coast stocks, production fall on week

US Atlantic Coast gasoline inventories shed nearly 6% week on week as regional refinery utilization fell to a five-week low, Energy Information Administration data showed March 23.

Total gasoline stocks drew by 3.446 million barrels to 57.206 million barrels the week ended March 18, a three-month low.

The Lower Atlantic led the draw, shedding 1.971 million barrels to 22.931 million barrels, followed by the Central Atlantic which drew 1.579 million barrels to 30.516 million barrels. Conversely, New England inventories added 105,000 barrels week on week to 3.759 million barrels.

East Coast refinery utilization dipped 6.7 percentage points to 80.6%, EIA data showed.

Production also fell across the region with conventional motor gasoline production down 6.1%, or 123,000 b/d, to 1.901 million b/d. Reformulated and finished motor gasoline production dipped 5% to 1.099 million b/d and 5.7% to 3 million b/d, respectively.

US product supplied of finished motor gasoline, or implied demand, was 307,000 b/d lower week on week at 8.637 million b/d.

US West Coast refinery utilization reaches six-month high

US West Coast refinery utilization increased for the third week and reached a six-month high the week ended March 18, Energy Information Administration data showed March 23.

Refinery utilization rose 2.7 percentage points to 87.7% of regional refinery operable capacity. Utilization was last greater the week ended Sept. 17 at 90.8% capacity.

Net refiner and blender production of finished motor gasoline continued to move in the opposite direction, as it declined 1.7%, or 25,000 b/d, week on week to 1.442 million b/d, which was the lowest production level in five weeks.

West coast gasoline imports rose by 22,000 b/d, or 17.9%, to 145,000 b/d, up from 123,000 b/d in the previous week. Despite increasing over 15%, imports were only at a two-week high.

Regional stocks built 1.7%, or 479,000 barrels, to 29.126 million barrels.

S&P Global Commodity Insights assessed March Los Angeles CARBOB unchanged March 23 at NYMEX April RBOB plus 74 cents/gal based on a lack of more competitive information.

April Los Angeles CARBOB will roll to a NYMEX May RBOB basis March 25.

San Francisco CARBOB tumbled 14 cents/gal to May futures plus 35 cents/gal, as it was heard traded last at that level.

US Midwest gasoline stocks fall to two-month low

US Midwest gasoline stocks drew for the third consecutive week and fell to a two-month low the week ended March 18, Energy Information Administration data showed March 23.

Inventories declined 1.2%, or 687,000 barrels, week on week to 57.847 million barrels, which was the lowest stock level since 57.483 million barrels the week ended Jan. 21.

Refinery utilization rebounded from its five-month low, rising 1.1 percentage points to 88.7% of regional refinery operable capacity.

Net refiner and blender production of finished motor gasoline declined 4.5%, or 111,000 b/d, to 2.353 million barrels b/d. Production was last lower the week ended Feb. 11 at 2.221 million b/d.

Zero barrels of gasoline were imported into the Midwest last week, down from 8,000 b/d the previous week. The last time the Midwest received zero imports was the week ended Jan. 7.

S&P Global Commodity Insights assessed 8.5 RVP Tulsa suboctane unchanged March 23 at NYMEX April RBOB minus 23 cents/gal based on a trade heard at that level.

Generic Pipeline CBOB also held steady day on day at April futures minus 10 cents/gal.

The flat prices rose 10.8 cents/gal to \$3.2087/gal for Tulsa suboctane and \$3.3387/gal for Generic Pipeline CBOB.

Tulsa suboctane was at its strongest since \$3.2626/gal on March 8, which is also the highest value since the assessment was launched on Sept. 4, 2013.

Generic Pipeline CBOB was last assessed stronger on June 10, 2013 at \$3.4281/gal.

— Staff

Diesel

Nationwide ULSD stocks near two and a half year low

Ultra-low sulfur diesel across the US reached two-week highs March 23, with total US stocks dropping to their lowest level in nearly two and a half years.

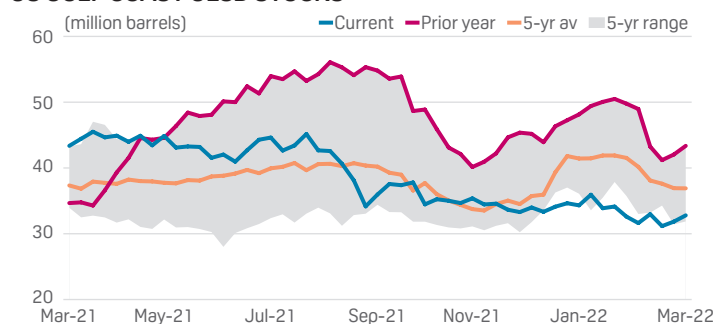
S&P Global Commodity Insights assessed benchmark US Gulf Coast ULSD on Colonial Pipeline's prompt 18th cycle up 26.81 cents to \$4.0423/gal, highest since reaching \$4.4813/gal on March 8.

Total US inventories of ULSD fell 2.27 million barrels to 102.3 million barrels for the week ended March 18, according to US Energy Information Administration data released March 23. The last time they were reported lower was Nov. 22, 2019, at 99.68 million barrels.

The nationwide draw was primarily caused by plunging ULSD stocks in New York Harbor, which plummeted 2.63 million barrels to 10.5 million barrels, lowest since they were reported at 10.15 million barrels in April 2015.

New York Harbor ULSD barges climbed 25.06 cents day on day to \$4.2898/gal, highest since March 8.

US GULF COAST ULSD STOCKS



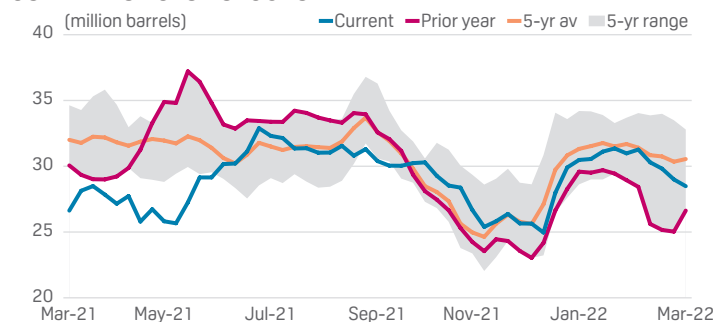
USGC inventories actually built week on week, growing 947,000 barrels to 32.8 million barrels.

The price jump was more extreme on the US West Coast, where Los Angeles CARB diesel rose 32.65 cents to \$4.0623/gal.

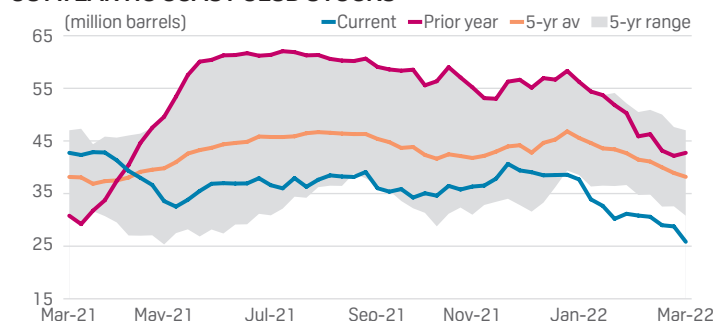
EIA data showed a healthy build along the West Coast, with inventories growing by 420,000 barrels to 11.62 million barrels.

Midwest stocks fell 515,000 barrels to 28.48 million barrels, an 11-week low.

US MIDWEST ULSD STOCKS



US ATLANTIC COAST ULSD STOCKS



Saudi exports fall to 4-month low in Jan

Saudi Arabia's gasoil exports fell 19.69% month on month to 2.78 million mt in January, snapping a three-month uptrend and touching a four-month low, Joint Organizations Data Initiative data showed March 23.

Gasoil exports were last lower at 2.4 million mt in September 2021, JODI data showed.

Industry sources attributed the decline to unviable arbitrage economics to divert surplus gasoil barrels to the west of Suez limiting cross-regional flows.

The front month gasoil Exchange of Futures for Swaps, which measures the spread between Singapore 10 ppm sulfur gasoil swaps and the corresponding ICE low sulfur gasoil futures contract and is an indicator of the arbitrage economics to ship Asian gasoil to the West, widened to minus \$14.43/mt in January from minus \$10.35/mt in December, S&P Global Commodity Insights data showed.

A deeper negative spread indicates that gasoil can command a higher price in the West than in Asia and typically points to arbitrage lanes being open. However, increasing backwardation in the gasoil

market made long-haul arbitrage voyages less economical in January, capping arbitrage flows to the West, sources said.

"The arbitrage has been wide open since the beginning of the year on paper, but the backwardation kills the arbitrage for long-haul," a refining source said March 22.

The front-month Platts Singapore 10 ppm sulfur gasoil derivative time spread averaged plus \$1.38/b in January, more than doubling from plus 61 cents/b in December, S&P Global data showed.

Mobility restrictions due to the emergence of the highly contagious omicron variant also dampened regional and international demand for gasoil in January, sources said.

The month-on-month decline in gasoil exports in January was also off a high base after exports reached a three-year high of 3.46 million mt in December; the outflow was last higher in December 2018 at 3.57 million mt, JODI data showed.

Even with the month-on-month decline, Saudi Arabia's gasoil

exports remained supported and were up 3.61% on a year-on-year basis due to tight supply in the international gasoil market, due in part due to a reduction in exports from China.

The JODI database is maintained by the Riyadh-based International Energy Forum.

—Staff

Jet

Global airline seat capacity lower on week: OAG

Global scheduled airline seat capacity fell to 80.8 million for the week starting 21 March, from 82.1 million the previous week, according to aviation data company OAG.

Western Europe, up 2.4%, overtook Northeast Asia, which saw a 10.6% reduction, to be the second-biggest region.

The latest round of COVID-19 lockdowns in China impacted domestic capacity with China Eastern seeing a 24% reduction in seat capacity.

Meanwhile, several regions including Upper South America, Central America and West Africa reported higher capacity than was available in 2019.

The Russia-Ukraine war has had some limited impact on air travel, OAG said.

"Whilst all of the major Western European airlines (Lufthansa, KLM, etc.) have dropped all capacity, other airlines such as Emirates and Turkish Airlines have actually added seats, providing alternative routings for those wanting to travel," OAG senior analyst John Grant said.

The OAG data showed Western Europe bookings for the next four months more than five times higher than at the same time in 2021.

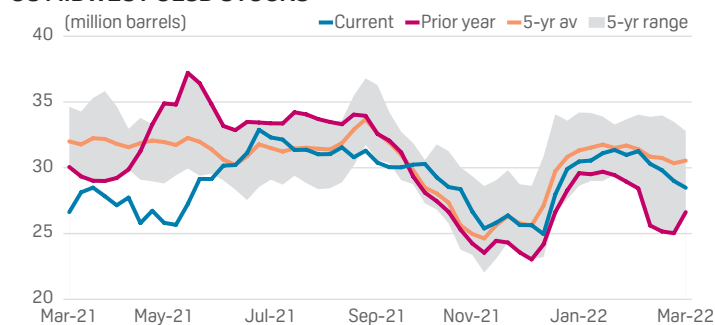
According to the European Organization for the Safety of Air Navigation (Eurocontrol), the seven-day moving average of European flight traffic increased to 74.4% of 2019 traffic levels in the seven days to March 22 from 73.6% in the previous week.

In terms of jet fuel, production in Europe has been falling because some refineries have been forced to reduce runs, according to a trader. Overall, the jet fuel market remains relatively tight with supply not able to catch up with the pick-up in demand, sources said.

Saudi exports slip 41% to 5-month low on COVID-19 woes

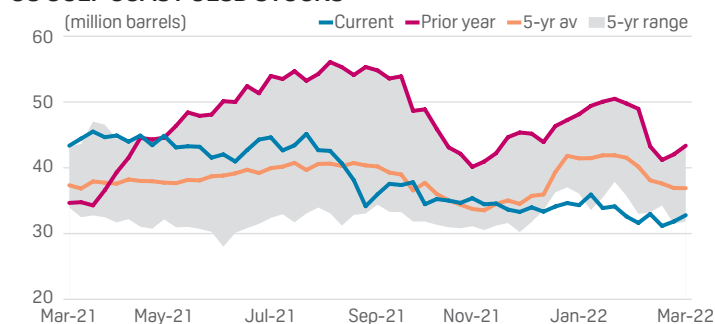
Saudi Arabia's January jet fuel exports fell 41.36% on the month to hit a five-month low, latest data from the Joint Organizations

US MIDWEST ULSD STOCKS



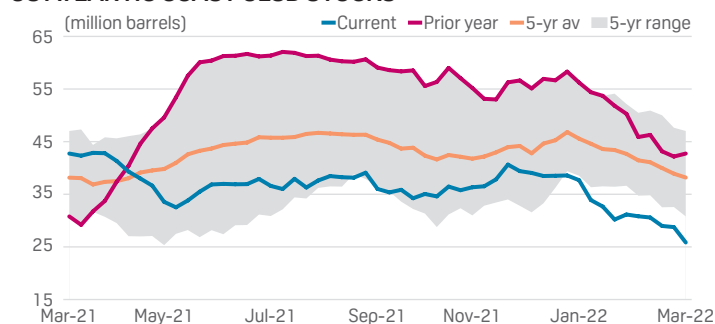
Source: US Energy Information Administration

US GULF COAST ULSD STOCKS



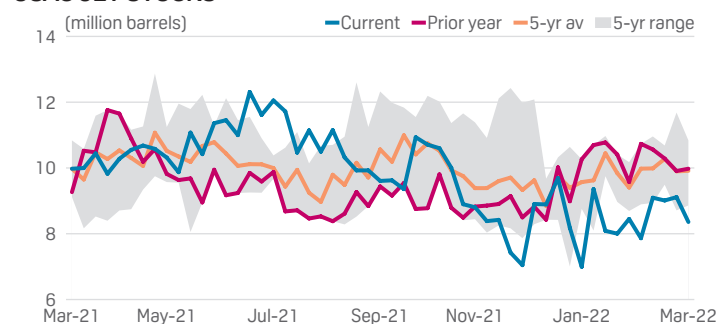
Source: US Energy Information Administration

US ATLANTIC COAST ULSD STOCKS



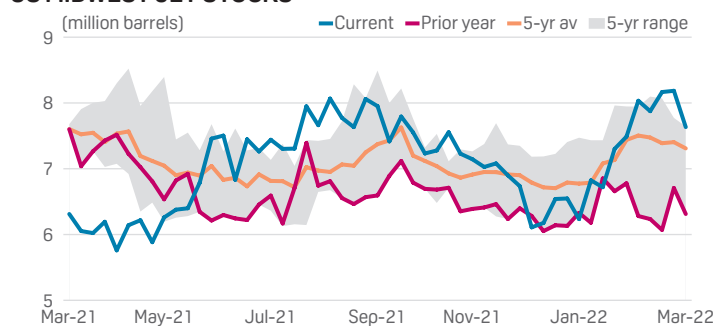
Source: US Energy Information Administration

USAC JET STOCKS

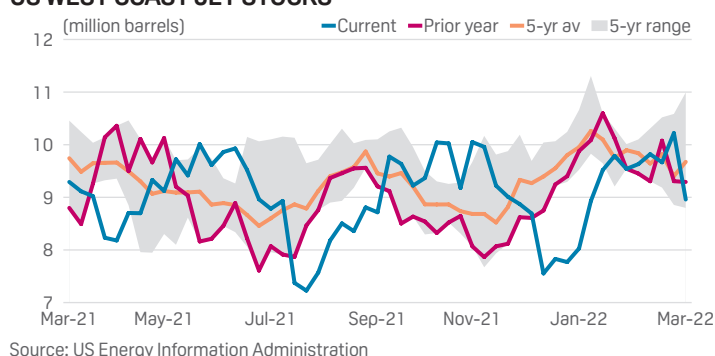


Source: US Energy Information Administration

US MIDWEST JET STOCKS



US WEST COAST JET STOCKS



Data Initiative showed, with the slide coming on the back of several countries reimposing travel curbs and border restrictions following the emergence of the omicron variant.

The country's jet fuel exports fell to 251,000 mt in January, down from 428,000 mt registered in December 2021. Historical data showed that exports were last lower in August 2021, at 165,000 mt. On a year-on-year basis, jet fuel outflows fell 26.69%, the JODI data showed.

Market participants attributed the decline to suppressed jet fuel demand due to tough restrictions enacted in late December 2021 through the early months of 2022 by several countries to curb the spread of the more transmissible variant, which resulted in governments stepping up border controls, quarantine durations and testing requirements.

The International Air Transport Association said in its latest monthly passenger traffic report that recovery in both domestic and international air travel slowed in January 2022, compared with December 2021.

"The recovery in air travel continued in January, despite hitting a speed bump called omicron. Strengthened border controls did not stop the spread of the variant. But where population immunity was strong, the public health systems were not overwhelmed," IATA's Director General Willie Walsh said.

January's total air travel demand, measured in revenue passenger kilometers, or RPKs, was up 82.3% year on year, but slipped 4.9% on the month.

However, industry sources said that with heightened controls only a temporary measure, jet fuel demand from the wider global market recovered quickly once those curbs were lifted, especially in the West. In addition, lean jet fuel supply and expectations of continued recovery

in the wider aviation sector were also seen as positive factors that would aid in boosting demand for the middle distillate.

"Many governments are now adjusting COVID-19 policies to align with those for other endemic viruses. This includes lifting travel restrictions that have had such a devastating impact on lives, economies and the freedom to travel," Walsh added.

The JODI database is maintained by the Riyadh-based International Energy Forum.

—Staff

Resid

China's Jan-Feb exports up 64% on year

China's fuel oil exports over January-February were 64% higher year on year at 5.03 million mt, General Administration of Customs data showed, with the increase in line with the country's bunkering expansion plan.

Most of the exports were fuel oil sold in the bonded bunker market, industry sources said.

China's bunker sales has grown rapidly as local refiners boosted production, resulting in competitive prices. Over January-February, Zhoushan-delivered 0.5%S marine fuel bunker prices averaged \$3/mt lower than Singapore, S&P Global Commodity Insights data showed.

Zhoushan, China's largest bunkering port, supplied 5.52 million mt of bunkering fuel — fuel oil and marine diesel — in 2021, up 17%, data from the Zhoushan Bonded Bunker Fuel Association showed.

February's exports were down 64% from January at 1.33 million mt, the GAC data showed, due to the government's requirement to cap refining utilization rates during the Beijing Winter Olympics.

Meanwhile, imports of fuel oil in February were up 5.3% month on month, as China still supplements its domestic production with imports.

China lifted its low sulfur bunker products in January and February, supporting the increase in bonded bunkering while imports declined.

The country's LSFO production hit a record high 1.15 million mt in January, followed by 1.12 million mt in February, data from local information provider JLC showed.

That meant output over the two months was up 58% year on year to 2.27 million mt.

The higher production has been encouraged by a 30% increase in the fuel oil export quota to 6.5 million mt in the first batch for 2022.

Russia's Feb fuel oil exports up 2.5% on year at 2.785 mil mt

Russian fuel oil exports in February rose 2.5% year on year but dropped 8.8% month on month to 2.785 million mt, according to data released March 23 by the Central Dispatching Unit of the energy ministry.

Russia's domestic fuel oil deliveries totaled 609,145 mt in February, down 17.5% year on year and down 12.8% from January levels.

Fuel oil exports were marginally higher on the year but lower on the month due to the shorter month. Meanwhile exports are expected to start falling from March as international buyers were shunning Russian origin products following Moscow's invasion of Ukraine.

Domestic deliveries were down as heating demand was gradually winding down with the weather becoming milder.

— [Staff](#)

Feedstocks

Asian naphtha sees support from gasoline

The Asian naphtha complex edged higher in early March 23 trading, as demand for naphtha as a blendstock was buoyed by the reforming spread widening to a more than nine-year high, however, demand for naphtha as a steam cracker feedstock was thin due to unhealthy downstream margins.

The reforming spread — the difference between Singapore 92 RON gasoline and Singapore naphtha derivatives — widened 2.10% on the day and 34.88%, or \$5.65/b, week on week to \$21.85/b at the Asian close March 22, S&P Global Commodity Insights data showed. The spread was last wider on Feb. 22, 2013, at \$22.05/b.

“The gasoline-naphtha spread has been widening steadily. Based on the strength of the gasoline complex, it is lucrative to increase reformate production,” said a Singapore-based trader.

Steam crackers were not keen to purchase more feedstock naphtha as downstream margins were poor, market sources said.

The downstream weakness was evident in the aromatics sector as the spread between key CFR Taiwan/China paraxylene and C+F Japan naphtha cargo remained below the typical breakeven level of \$280-\$300/mt.

The spread widened \$7.50/mt on the day to \$244.045/mt at the March 22 Asian close, and is likely to keep splitter run rates low.

Meanwhile, arbitrage from Europe to Asia remained shut, sources said. The key East-West spread was pegged by brokers at minus \$7/mt in mid-morning Asian trade March 23.

European naphtha outpaced Asian naphtha values as the spread narrowed \$3.25/mt on the week to minus \$8.00/mt at the London close March 22, according to S&P Global data.

In tender news, Mitsui Chemicals was seen in the spot market seeking open-specification naphtha, with minimum 73% paraffin content, for delivery over April 29 - May 5 to Osaka, Japan.

The tender closes March 23, with same-day validity, according to market sources.

YNCC to restart Yeosu steam cracker

South Korea's Yeochun Naphtha Cracking Center plans to restart its No. 3 naphtha-fed steam cracker in Yeosu April 3 following a planned shutdown Feb. 20 in the wake of an explosion nine days earlier, a company source said March 23.

The company is targeting operating rates across its three crackers at 85% of capacity for April, according to several market sources in South Korea.

YNCC was last heard to have bought naphtha with a minimum 70% paraffin content for H1 May delivery at a premium of around \$10/mt to the Mean of Platts Japan naphtha assessments, CFR, pricing 45 days prior to delivery.

YNCC declared force majeure at the No. 3 steam cracker in Yeosu

in a letter to customers dated Feb. 14, S&P Global Commodity Insights reported earlier.

In the letter viewed by S&P Global, YNCC said South Korea's Ministry of Manpower had ordered it to halt operations as of Feb. 11.

This came after an explosion at the No. 3 cracker, which is able to produce 470,000 mt/year of ethylene and 270,000 mt/year of propylene, on Feb. 11.

Propylene impact

Asia's propylene market surged following YNCC's force majeure declaration, supported by robust demand from buyers in Yeosu, who continue to jostle for cargoes.

The FOB Korea marker has continued to receive firm support in March after a surge in crude oil prices and ahead of planned output cuts by many crackers in South Korea in April.

The restart of the YNCC No. 3 cracker will provide some relief to the propylene spot market, a propylene trader in South Korea said. “It will pull down the FOB Korea price,” the trader added.

The impact in the ethylene market was expected to be limited as YNCC's reduced run rate would mean spot availability was unlikely, market participants surveyed said.

“We think they will have very limited spot, if any, because they also need to consider their downstream and term customers,” a market source based in South Korea said.

Offers for ethylene have been at \$1,400-\$1,450/mt FOB Korea amid run rate cuts due to high naphtha prices, with operating rates expected to be reduced further in April.

YNCC's No. 3 unit also has an aromatics production capacity of 110,000 mt/year of benzene, 60,000 mt/year of toluene and 30,000 mt/year of xylenes.

Asian toluene prices have been strong in the last few weeks amid tight supply from South Korea and run cuts at plants across Southeast Asia and North Asia. Prices have also raced up in line with crude oil since Russia's invasion in Ukraine on Feb. 24.

The FOB Korea toluene marker has surged \$189/mt since Feb. 11 to be assessed at \$1,060/mt March 23, S&P Global data showed. The resumption of the No. 3 steam cracker in Yeosu was expected to increase supply in the market and in turn moderate prices, trading sources said.

— [Staff](#)

Gas liquids

US propane stocks post first build in 15 weeks

Total US propane stocks climbed slightly for the first build in more than three months in the week ended March 18, Energy Information Administration data showed March 23.

Propane stocks gained 256,000 barrels to 33.6 million barrels to conclude a stretch of 14 consecutive weekly draws. US propane stocks last recorded a build in the week ended Dec. 3, 2021, according to EIA data.

US Gulf Coast [PADD 3] stocks also gained on the week, building 15,000 barrels to 19.2 million barrels.

Propane production, product supplied and exports all declined week

over week.

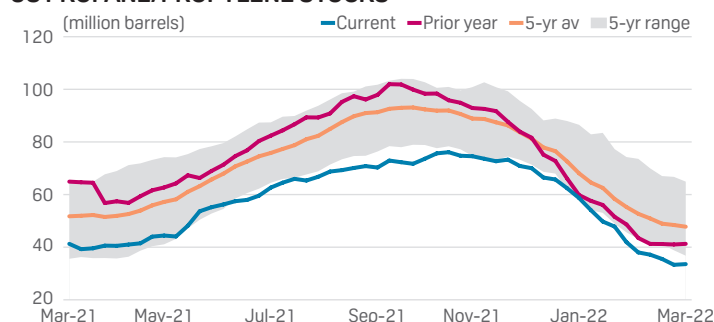
Propane production slipped 6,000 b/d to 2.36 million b/d while product supplied, or implied demand, tumbled 192,000 b/d to 1.34 million b/d.

Propane exports recorded a second consecutive weekly draw and fell 160,000 b/d to 1.13 million b/d, a six-week low.

According to S&P Global Commodity Insights data, 13 VLGCs loaded from US ports in the week ended March 18. Two each were bound for Asia, Latin America and Northwest Europe with destinations of Indonesia and Japan, Mexico and Brazil, plus Belgium and the Netherlands. An additional VLGC was bound for Spain.

Commodity Insights assessed March non-LST propane, reflecting barrels at the Enterprise NGLs storage and fractionation facility in Mont Belvieu, Texas, at \$1.475/gal March 23, up 6 cents day on day and based on a trade in the Platts Market on Close assessment process during which DCP sold 25,000 barrels to Trafigura. Spot propane reached the highest level in more than two weeks.

US PROPANE/PROPYLENE STOCKS



Source: US Energy Information Administration

— Staff

Tankers

Suez Canal to raise crude tanker tariffs May 1

The Suez Canal Authority said it will raise transit fees for crude oil tankers by 15% for laden vessels starting May 1, citing increased economics for shipping.

Ballast crude tankers will see a 5% rise in transit fees, the canal authority said on its website March 22. The decision followed the “significant growth in global trade, the improvement of ships’ economics” and the enhanced transit services, the canal authority said.

Market sentiment for crude tankers has been mixed, with jumps in freight rates for benchmark routes that go through the Suez Canal seen after Russia’s invasion of Ukraine Feb. 24, although freight rates have since declined.

Platts assessed the 140,000 mt Dirty Arab Gulf-UK Continent route at w29.5 Feb. 23, and then it jumped sharply, climbing to w55 March 7, according to data from S&P Global Commodity Insights. Since then, freight on the route has decreased more or less continuously, last assessed at w45 March 23.

Tanker firms described weak market sentiment in the fourth

quarter of 2021 and Q1 of 2022, with outlooks mixed.

“Despite seasonal weakness in demand, tonnage demand in the crude tanker market is expected to increase, as financial sanctions on Russia have been compelling buyers of Russian oil to scout for alternative supply,” analysts at marine consultancy Drewry said in a note March 22, adding that the higher Suez Canal transit fees were likely to increase ton-miles and reduce the supply of tonnage.

Analysts at S&P Global projected a more mixed view, however. On the bullish side, sentiment was strong, as shipowners held back vessels while they waited for clarification on the impact of trading with Russian entities or trading Russian barrels, and analysts said rates could reach multi-year highs, especially in the Black Sea and Baltic Sea.

On the less bullish side, oil demand grew by 5 million b/d in 2021, and it was still expected to grow, but it is facing headwinds from high oil prices arising from the Russia-Ukraine conflict. Platts assessed Dated Brent at \$120.33/b March 22, up from \$100.48/b recorded Feb. 23.

S&P Global analysts expected freight rates to start coming down again from about the second half of April because of ample tonnage, especially for Aframaxes in the Atlantic Basin.

The Suez Canal is one of the world’s most critical commodity chokepoints, connecting the Red Sea with the Mediterranean. Almost 10% of total seaborne oil trade passes through the waterway, according to data from the US Energy Information Administration.

Around 418 crude tankers passed through the Suez Canal per month in 2020, accounting for 27% of global vessels, data from the port authority showed. The canal authority last raised transit tariffs Feb. 1.

— Staff

NEWS

OIL FUTURES: Crude rallies as market eyes new sanctions on Russia, US crude draw

- US crude stocks see counter-seasonal draw
- EU mulls sanctions on Russian energy
- Putin demands gas payments in rubles

Crude futures pushed higher March 23 as the market weighed a US inventory draw and the potential for further disruptions to Russian supply.

NYMEX May WTI settled at \$114.93/b, up \$5.66, and ICE May Brent finished \$6.12 higher at \$121.60/b.

Total US commercial crude stocks fell 2.51 million barrels to 413.4 million barrels in the week ended March 18, EIA said, leaving stocks 12.5% below the five-year average.

The draw comes as US crude exports surged to 3.84 million b/d, up 900,000 b/d from the week prior and the highest level since June 2021.

The US inventory draw added a tailwind to markets already moving higher overnight amid a focus on the possibility of an EU import ban on Russian oil and energy products.

The US and its European allies are expected to levy further

sanctions against Russia later this week, but the 27 European Union foreign ministers had disagreed on imposing sanctions on Russian oil and energy products during a March 22 meeting in Brussels.

The discussion has met objections from German Foreign Minister Annalena Baerbock. She stressed that the EU could not cut itself off from Russian oil and gas and should focus on reducing its reliance on Russian energy exports. Foreign ministers are expected to reconvene March 24 for further discussion.

“European foreign ministers appeared to be split on the issue. Germany’s current opposition to a Russian oil embargo remains an obstacle, which probably means there will be no short-term change in the status quo,” SPI Asset Management Managing Partner Stephen Innes said in a note.

“It appears unlikely current sanctions will ease anytime soon, even during a ceasefire, with US and UK implementing a hard ban. Still, with few levers remaining to pressure Russia short of military intervention, the market is beginning to price in the loss of a significant amount of Russian oil needing to be backfilled,” Innes added.

Even without official sanctions, however, industry avoidance of Russian oil exports could tighten global supply balances.

Russian President Vladimir Putin March 23 ordered Gazprom to sell gas to Europe in rubles and threatened to extend the measure to other exports.

European gas prices jumped on Putin’s announcement, adding support to diesel prices.

NYMEX April ULSD settled up 25.06 cents at \$4.1148/gal and April RBOB climbed 10.80 cents to \$3.4387/gal.

Analysts said that switching to the ruble could complicate paying for Russian energy. “It’s definitely a risk factor as this would create complications for European buyers of Russian gas,” said S&P Global Commodity Insights analyst James Huckstep.

— [Chris van Moessner](#)

Too early to talk about OPEC+ quota adjustment for Russia in response to sanctions: Novak

Russian deputy Prime Minister Alexander Novak said March 23 it was too early to talk about an adjustment to Russia’s quota under the OPEC+ crude production agreement as a result of sanctions.

In recent weeks, Western countries and oil majors have introduced sanctions against Russia, including restrictions on hydrocarbons imports, in response to the invasion of Ukraine.

“It is too early to talk about this now, because we are still ensuring all supplies,” Novak said, when asked whether Russia will discuss with OPEC+ adjusting its quota due to the impact of Western sanctions, the Prime news agency reported.

A Gulf delegate told S&P Global Commodity Insights March 23 that, as of now, the issue has not been discussed.

Details on Russian production in March have not yet been released, but February data did not show a decline in output. Russia produced 10.11 million b/d in February according to a monthly S&P Global survey. That was up 30,000 b/d month on month but below Russia’s quota of 10.227 million b/d.

— [Rosemary Griffin](#)

UK joins European countries cutting fuel duty in response to surging pump prices

- Measure comes amid tightness in European fuel, feedstock markets
- Self-sanctioning of Russian oil products adding to pressure at pump
- UK tax cut on fuel largest on record, according to government

The UK has become the latest European country to cut its fuel duties in a bid to tame record high pump prices in the wake of Russia’s invasion of Ukraine.

A reduction in duty for gasoline and diesel will be in place for 12 months, the UK government announced March 23, lowering the cost for gasoline and diesel by 5 pence per liter in the “largest cut across all fuel duty rates ever.”

The move is estimated to save the average car driver GBP100 (\$132) and will cost the government GBP2.4 billion over the year. Much of the shortfall, however, will be recovered through higher VAT returns from the higher pump prices.

The average cost of a liter of diesel rose to a record high of almost GBP1.80 March 22, while gasoline increased to a record GBP1.67/liter, according to figures from the RAC’s Fuel Watch.

ULSD and naphtha

Self-sanctioning of Russian oil product exports has supported fuel prices. Russia is a key exporter of ultra low sulfur diesel (ULSD) and naphtha — a crucial gasoline blending component — to the European market.

Prices for European gasoline cargoes on a delivered basis into the UK rose \$120.50/mt in the week to March 22, when they were assessed at \$1,119.25/mt. In the same period, prices for cargoes of ULSD delivered into the UK rose \$256.75/mt and were assessed at \$1,240.50/mt, S&P Global Commodity Insights data showed.

Road transport accounts for more than half of oil demand in the UK, with gasoline and diesel meeting around 98% of transport energy needs. The country’s diesel sales averaged about 600,000 b/d in 2021, according to estimates by S&P Global Commodity Insights, more than double gasoline sales of about 250,000 b/d.

Green pushback

As oil prices surged past \$100/b after Russia’s invasion of Ukraine on Feb. 24, pressure has mounted on the European governments to defray rising pump prices by cutting fuel duties. Belgium, Croatia, Cyprus, Greece, Hungary, Ireland, Italy, Malta, Netherlands, Portugal, Slovenia, Sweden have all reduced fuel duty in a bid to cut pump prices in recent weeks. On March 10, the Czech government decided to abolish an obligation for fuel distributors to mix biofuels into diesel and petrol, in a move aimed at curbing rocketing fuel costs.

The moves to ease fuel prices have faced pushback from green groups, however, which claim that easing costs of fossil fuels could derail long-term decarbonization plans in the region.

According to the study by green transport group Transport & Environment (T&E), dual tax cuts for drivers will cost European taxpayers almost Eur9 billion, with the richest motorists receiving eight times more public money than the poorest, on average.

— [Rowan Staden-Coats, Robert Perkins, Lucy Brown](#)

Argentinian refiners seek more local crude as costly diesel, gasoline imports surge

- Diesel, gasoline imports have doubled this year
- Oil producers are exporting more supplies on higher international prices
- Refiners have 10%-15% idle capacity

Argentina's refiners are in talks with oil producers to increase crude deliveries to their plants as rising domestic diesel and gasoline demand combined with difficulties in importing supplies of these products raise concerns of shortages, according to a senior executive at a leading oil refiner.

"We have capacity in the refineries to process more local crude so that we can import less" diesel and gasoline supplies, Teofilo Lacroze, CEO of Raizen Argentina, the second-largest refiner in Argentina, told S&P Global Commodity Insights late March 22 on the sidelines of the Argentina Oil & Gas conference in Buenos Aires.

While Lacroze said he spoke of the entire industry, his company, which has about a 20% market share of sales, is monthly importing some 630,000 barrels of diesel and gasoline, twice that of last year. Most of the imports are of diesel, he added.

"We need more crude," Lacroze said.

The challenge in securing more crude locally is that Argentinian producers have been exporting more oil to take advantage of international prices, which at around \$115/b for Brent is twice the government-capped domestic price of \$60/b, Lacroze said.

Raizen, a joint venture between Brazilian sugarcane and energy company Cosan and Shell, and other refiners had not complained until this year that the crude exports were leaving them short of supplies. That's because demand for petroleum products was still recovering last year from the coronavirus pandemic, when their capacity use fell to as low as 40% from a pre-pandemic 80%. That capacity utilization rate has since recovered to 77% in January, according to data from Indec, the state statistics agency.

This year, however, the lack of crude combined with rising demand has led to a surge in imports of refined products, led by diesel and to a lesser extent gasoline. Lacroze estimates that imports have doubled this year from 2021, and warned that with the harvest of corn, soybeans and sunflower seeds getting underway, a rise in diesel demand is going to push up imports even more unless refiners can secure more crude.

"There is a lot of demand and the refineries have not been filled yet," Lacroze said in a presentation at the conference, estimating idle capacity at about 10% to 15%. "But there is crude. Instead of exporting crude, [producers] have to supply the local market."

The challenge in this is that the government is keeping a cap on local crude prices to try to contain inflation, which is at 52% and accelerating. This is a disincentive to redirect crude exports to the local market when Brent is nearly twice the local price of crude.

Lacroze said he expects that oil producers will agree to reduce crude exports to what he called a "reasonable" amount to compensate for the price difference, allowing refiners to reduce imports at a time when supplies have been harder to source. The bans on buying Russian

crude in retaliation for its war on Ukraine have reduced the available supplies of diesel and gasoline in the international markets.

"There is more demand than supply in the world," Lacroze said.

"This is the challenge in the very short term. The supply of imported diesel is not guaranteed."

Lacroze added that he expects producers, some of which also have refineries, will understand that the worst case would be for there to be shortages of diesel and gasoline in the market when they are exporting crude, even if this puts a dent in their profits.

"We have to resolve this soon," he said.

Not enough dollars for imports

Refiners are importing 30% of Argentina's diesel needs, twice as much as last year, Lacroze said, adding that when factoring in the higher international price that means refiners are paying three times the amount this year than last year.

Raizen may also delay a planned shutdown for maintenance because of the lack of imported supplies, he added.

Even if more imported supplies can be found, the dollars may not be available to buy them at a time when international prices have gone up, he warned.

When this need to import more refined products is combined with an expected increase in natural gas imports this year — estimated to be 14% more than in 2021 — also at higher prices, huge amounts of dollars will be needed for energy imports, Lacroze said.

"If we keep importing what we have been importing, there won't be enough central bank reserves to pay for it all," he said in his presentation.

The government has been limiting all imports and requiring companies to refinance foreign debts to try to protect international reserves, which have fallen to a dangerously low level of \$37 billion, or less than half the \$77.5 billion the level in early 2019 when the country was dropping deeper into a financial crisis it is still trying to emerge from.

— [Charles Newbery](#)

Trafigura secures \$2.3 billion crude facility to manage 'unprecedented market conditions'

- Credit facility marks a 'significant increase' from initial amount
- Ukraine crisis has seen energy margin calls spike on volatility
- Follows call by European energy traders for emergency liquidity funds

Trafigura has closed the syndication of a \$2.3 billion, multi-currency revolving credit facility, the commodities trader said March 23, as the market struggles to cover surging margin calls on energy deals due to price volatility in the wake of Russia's invasion of Ukraine.

Trafigura said the credit facility marks a "significant increase" from the initial underwritten amount of \$1.2 billion-equivalent.

"This additional liquidity buffer enhances Trafigura's ability to manage the current unprecedented market conditions, and demonstrates once again strong support from the banking

community,” CFO Christophe Salmon said in a statement.

Trafigura is part of a group of European energy traders that have called for central banks to provide emergency liquidity funds as major commodity price swings threaten to swamp cash flows needed for margin calls.

The European Federation of Energy Traders said in a letter to regulators dated March 8 that energy market participants were already in a position where their ability to source additional liquidity was severely reduced or, in some cases, exhausted.

Margin requirements for energy commodities have jumped six-fold within the last four to six months, EFET noted, as the extreme volatility in prices led to a liquidity squeeze, for example, at energy producers that hedge large volumes of gas and power.

Russia’s invasion of Ukraine has seen key energy commodity prices roiled by sanctions and fears of major trade disruptions to Russian energy exports. ICE Brent crude futures hit a 14-year high of \$139/b in intra-day trading on March 7, while the front-month Dutch TTF gas price soared from Eur75/MWh on Jan. 7 to more than Eur300/MWh in early March.

Trafigura said Mizuho Bank, Societe Generale, Sumitomo Mitsui, and UniCredit Bank acted as lead arrangers, book-runners, and underwriters for its credit facility.

—Robert Perkins

Turnaround at Guyana’s Liza Phase-1 development will raise FPSO’s capacity

- Will expand Liza-1 production capacity to 140,000 b/d
- Liza Phase 2 on track to reach peak output in Q3

A planned turnaround is currently underway at Guyana’s offshore Liza Phase 1 oil development on the Stabroek Block, where the work includes optimization aimed at increasing by 20% the 120,000 b/d capacity of the FPSO that produces Liza crude, the top executive of Stabroek partner, Hess Corp. said late March 22.

In addition, Guyana’s offshore Liza Phase 2 oil development at Stabroek, which came online earlier this year, is still on track to reach peak production capacity of 220,000 b/d in the third quarter, Hess Corp. CEO John Hess said in a webcast at the Scotia Howard Weil annual energy conference.

Liza-1, which began production in 2019, will have an expected capacity of more than 140,000 gross b/d of oil after its March 2022 optimization, he said.

“We continue to see the potential for at least six FPSOs to produce greater than 1 million barrels of oil per day in 2027 and longer term for up to 10 FPSOs to develop the discovered resource base,” Hess said.

“Our Guyana discoveries are some of the industry’s largest of the past decade,” he said. “The reservoirs rank among the highest quality in the world, with high porosity and permeability that are expected to deliver very high recovery factors and production rates.”

Since Guyana’s producing horizons are relatively shallow and there is no salt, the wells can be drilled faster and at lower cost than those in other deepwater basins in the world, he added.

Stabroek is operated by ExxonMobil with a 45% stake, while Hess holds 30% interest and China’s CNOOC is a 25% partner.

23 ‘significant’ discoveries

The trio have made 23 “significant” discoveries on Stabroek, where two more developments are actively in progress, John Hess said.

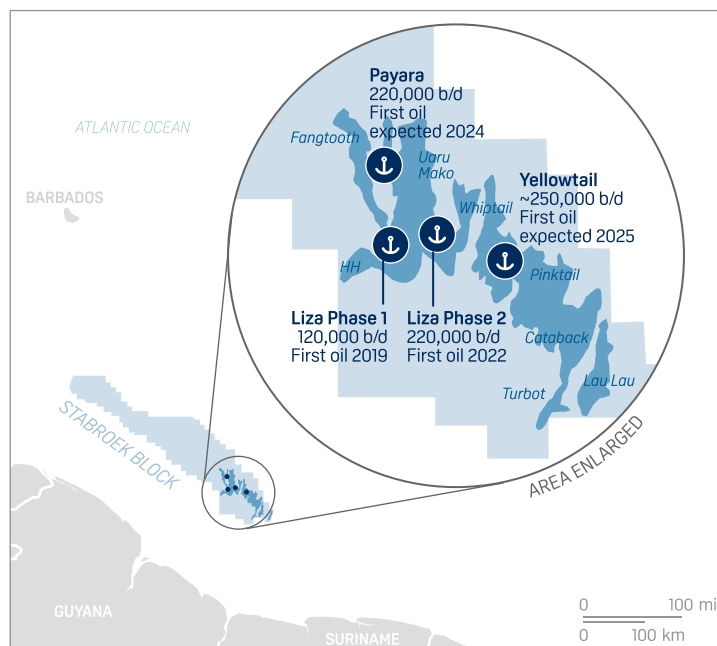
The Payara development is slated to come onstream in 2024 as the third Stabroek development; its FPSO will also be capable of producing 220,000 b/d gross. Yellowtail, the fourth development, has not yet been sanctioned, but the plan is to have it onstream by 2025 with an FPSO of 250,000 b/d gross capacity.

In addition, a fifth development is foreseen by 2026 and a sixth in 2027.

“In total, we see the potential for up to 10 FPSOs ultimately to develop the discovered resource to date on the Stabroek Block,” John Hess said. “We’ve discovered greater than 10 billion barrels of oil equivalent recoverable resource [at Stabroek] and are positioned to grow gross production to more than 1 million barrels of oil per day in 2027.”

The Guyana developments have a break even oil price of \$25/b to \$35/b Brent.

FPSOs ON GUYANA’S EXXONMOBIL-LED STABROEK BLOCK



Source: S&P Global Commodity Insights, Hess Corporation

Also, Hess has spudded a deepwater Gulf of Mexico exploration well named Huron, ending a two-year exploration hiatus in that arena, John Hess said. The company operates the well with a 40% stake, and is partnered with Shell and Chevron on the prospect at Green Canyon Block 69.

Huron, a US Gulf Miocene prospect

“It’s a large Miocene prospect,” of the kind found in that area of the US Gulf, John Hess said. “Later this year, we will also spud the Llano-6

development well, which will be a tieback to Shell's Auger facility."

Hess has 50% stake in the Llano-6; Shell operates the Llano field, sited in the Garden Banks area of the US Gulf offshore Louisiana.

Onshore, the US' Bakken Shale in North Dakota is Hess' largest operated asset. The company has 460,000 net acres in the core of the play, where it has at least a 15-year drilling inventory, and currently operates a three-rig program.

But the company will give "strong consideration" to adding a fourth rig if oil prices "remain firm," John Hess said.

The company produced 159,000 boe/d from the Bakken in Q4 2021. For 2022, Hess expects bring online about 85 new wells and average 160,000-165,000 boe/d of production from the play.

"In 2022, we forecast our EURs [estimated ultimate recoveries from each typical Bakken well] to average near 1.2 million boe, have IP-180 rates averaging near 120,000 barrels of oil and internal return rates averaging more than 100% at \$60/b WTI," John Hess said. "Obviously at current prices, these metrics are even more impressive."

— [Starr Spencer](#)

Oil traders warn of \$200/b plus price spike as Ukraine crisis unnerves markets

- Demand destruction could also trigger a quick decline
- Trafigura's Luckock sees fundamentals supporting \$150/b
- Conflict could displace Russian energy in Europe

Global oil prices could spike well over \$200/b in the coming months if Russia's invasion of Ukraine escalates and sidelines more oil production as the world struggles find alternative supplies, oil traders and market watchers said March 23.

With growing volumes of Russian crude and oil products being shunned by European buyers and the EU drawing up proposals to slash its imports of Russian oil and gas in the coming years, a major supply shock is looming to replace Russia's oil exports, oil traders said.

"For me, the supply and demand balances are bullish into the summer and are only get tighter and tighter," Trafigura's head of oil trading Ben Luckock told the FT Commodities Global Summit. "I believe oil prices are not only justifiedI believe we're going to continue higher."

Luckock said he sees Brent crude figures rising up to \$150/b this summer given current market fundamentals, but accepted that prices could spike higher over \$200/b given "a nasty set of circumstances".

Other oil traders and market watchers speaking on the same panel at the event predicted crude prices could shoot over \$200/b given further disruptions to Russian oil.

"I think this is not transitory, this is just going to be a crude supply shock... I can easily see \$200 to \$250/b this year," CEO of RCMA Capital Douglas King, who predict a \$225/b price spike when pressed for a figure.

Brent crude futures traded over 3.5% higher to hit almost \$120/b in midday European trade March 23 after reports of a major disruption

to Kazakh oil exports via Russia stoked supply concerns. The price benchmark spiked to a 14-year high of \$139/b on March 7, but dropped back below \$120/b after just three days.

Supply gap

A US and UK import ban and oil industry boycotting of Russian oil could see flows drop up to 3 million b/d in the coming months, or some 3% of global supplies, according to estimates by the International Energy Agency.

According to analysts from S&P Global Commodity Insights, dislocated Russian exports will cause crude production shut-ins of 2.8 million b/d in the country from late March through May.

S&P Global analysts currently forecast Dated Brent to average \$115/b in March before declining to around \$81/b by year-end.

But as the EU considers a phase-out of Russian fossil fuel imports to the region and calls grow for sanctions on Moscow's oil and gas, the stage is set for a major supply gap in Europe over the coming years, the panelist said.

"The story with Russia is a game-changer, it's not a supply disruption that lasts a few months and then it's gone," said Pierre Andurand, Founder & CIO of energy hedge fund Andurand Capital. "We're not going back to normal business in a few months and I think we're losing the Russian supply on the European side forever and we've got to plan for that."

Demand destruction

Europe is a major buyer of Russian oil and was importing about 2.7 million b/d of Russian crude — around a quarter of total imports, and another 1.5 million b/d products, mostly diesel — before the invasion of Ukraine.

"This isn't a temporary problem. You now have to deal with this as a longer-term issue which means you need to find alternate supply growth once the world readjusts and recalibrates its demand and supply buttons," Standard Chartered Bank's head of oil, gas, chemicals and commodities Alok Sinha said.

If oil prices rise to levels over \$100/b in the near term, however, the global economy could suffer, setting up a potential sharp price contraction if oil demand is hit, Trafigura's Luckock said.

"I do think there's scenarios where oil prices rally too far. You get demand destruction, you damage economies, and you end up with much lower oil prices sooner than people think," Luckock added. "The higher you go now, probably the lower we go sooner."

Morgan Stanley last week lowered its oil demand growth forecast for 2022 by 600,000 b/d to reflect weaker consensus GDP forecasts from high energy costs and a surge in COVID-19 cases causing lockdowns in China.

The bank raised its Brent oil price estimate for the third quarter by \$20/b to \$120/b as it expects production losses from Russia to still outpace the impact of a resurgence of COVID-19 lockdowns in China and demand destruction from high energy costs.

— [Robert Perkins](#)

Saudi Arabia intercepts 'explosive laden' boats in the Red Sea

- Saudis say attack in the Red Sea was thwarted
- Also intercepted a ballistic missile headed towards Jizan

Saudi Arabia, the world's largest exporter of crude, said March 23 it had intercepted two "explosive-laden boats" in the Red Sea, through around 7 million b/d of crude transits to global markets.

Two booby-trapped boats that set off from Yemen's Hodeidah Governorate were intercepted "thwarting an imminent hostile attack in the southern Red Sea", local television Al Arabiya reported, citing Saudi Arabia's coalition in Yemen.

Oil prices remained elevated following the attack, with Brent futures up 3.6% from the overnight settle trading at \$119.67/b at 1306 GMT.

The incident in the Red Sea is the latest in a spate of attacks against Saudi Arabia and the country's oil infrastructure. Late on March 22, Saudi forces intercepted and destroyed a ballistic missile that was fired towards the southern city of Jizan, which lies north of the Yemeni border.

Most exports of petroleum and natural gas from the Persian Gulf that transit the Suez Canal or the SUMED pipeline pass through both the Strait of Hormuz and the Bab-el-Mandeb strait into the Red Sea.

On March 20, Houthi militants targeted Aramco's Yanbu Aramco Sinopec Refining Co. (Yasref) refinery resulting in temporary reduction of its output.

Saudi forces also foiled attempts on March 19 to target energy infrastructure in Yanbu, Khamis Mushait and Dhahran al-Janoub using a ballistic missile and several armed drones.

The hit to the refinery and repeated attacks prompted the Saudi Ministry of Foreign Affairs to issue a statement on March 21 that the country was not responsible for any supply outages in the oil markets if attacks against its energy infrastructure by the Houthi rebels continued unabated.

The ministry called for international recognition of the threat posed by Yemen's Iran-backed Houthis against the kingdom's oil and gas facilities and global energy security.

According to the S&P Global Oil Security Sentinel, the kingdom's oil and energy infrastructure has been targeted over 40 times since 2017, with the biggest incident occurring in 2019 when drone attacks hit the giant Abqaiq oil processing facility.

The incidents are on the rise as western powers and Iran appear to be closing in on a new nuclear deal that would relax sanctions on Iranian oil exports. Saudi Arabia and its Gulf Arab neighbors have opposed the west's rapprochement with Iran, their longstanding geopolitical rival that they accuse of destabilizing the region, and have insisted on stronger security guarantees.

— [Jennifer Gnana](#)

Refinery updates

Shebelinka Gas Processing Plant, Ukraine

- Owner: Naftogaz Ukrainy (state-owned)
- Capacity: Effective 11,500 b/d (500,000 mt), nominal 1.2 million mt/

year of gas condensate

Notes: Shebelinka GPP, Ukraine's second-largest producer of diesel and gasoline, which operates under the Shebel brand name, has remained largely offline since Feb. 26, due to the threat of shelling, operator Naftogaz said in a March 22 statement.

The facility suspended operations following Russia's invasion of Ukraine. However several processing units that produce LPG continue to operate.

Source: Naftogaz

Mina al-Ahmadi and Mina Abdullah, Kuwait

- Owner: Kuwait National Petroleum Co.
- Overall capacity: 346,000-454,000 b/d, to have a combined capacity of 800,000 b/d upon integration

Notes: The Clean Fuels Project at Kuwait's Mina al-Ahmadi and Mina Abdullah refineries, which was officially inaugurated March 22, was fully operational, local media reported.

The project which involved modernizing and raising the capacity of Mina Abdullah and Mina al-Ahmadi to 454,000 b/d and 346,000 b/d, respectively was completed late September 2021.

The Clean Fuels Project, ongoing since 2014, seeks to combine and upgrade the Mina Abdullah and Mina al-Ahmadi refineries into a single 800,000 b/d complex. Work at the Mina al-Ahmadi refinery was completed in 2020. All units at Mina Abdullah were completed in the summer of 2021.

Source: Reports

— [Staff](#)

US crude oil inventories fall amid strong exports, steady refinery demand [...from page 1](#)

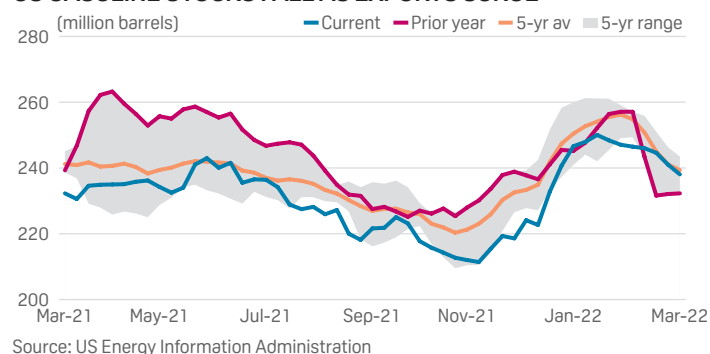
of \$4-\$4.50/b seen since December.

European-bound cargoes have also become more lucrative in recent weeks, with the arbitrage incentive for WTI MEH averaging \$3.98/b compared with North Sea Forties so far this month. This incentive averaged \$1.56/ in February and was less than \$1/b in January and December.

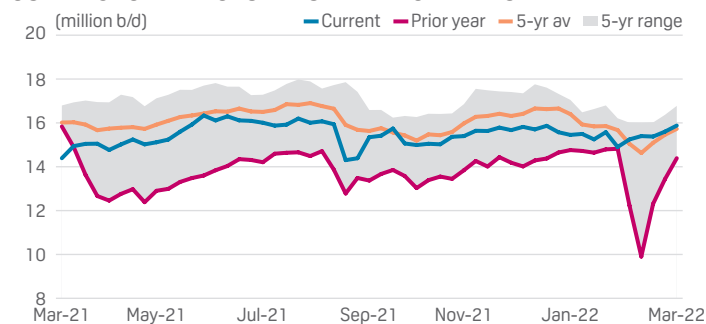
Meanwhile, US refinery net crude inputs climbed 280,000 b/d to 15.88 million b/d, holding steady at around 1% above the five-year average for this time of year. Refinery utilization climbed for a fifth straight week and averaged 91.1% of capacity, an increase of 0.7 percentage point from the week prior and the highest since September 2021.

Refinery runs have been supported by strong margins. US Gulf

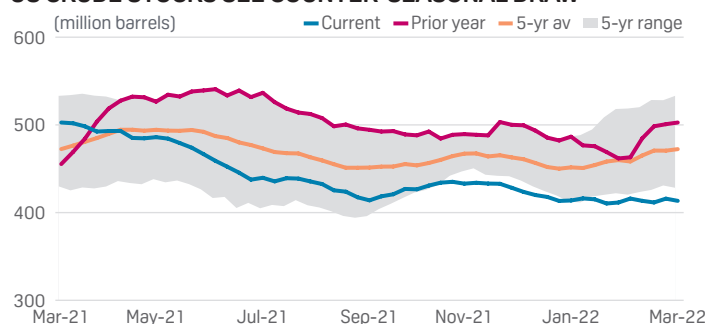
US GASOLINE STOCKS FALL AS EXPORTS SURGE



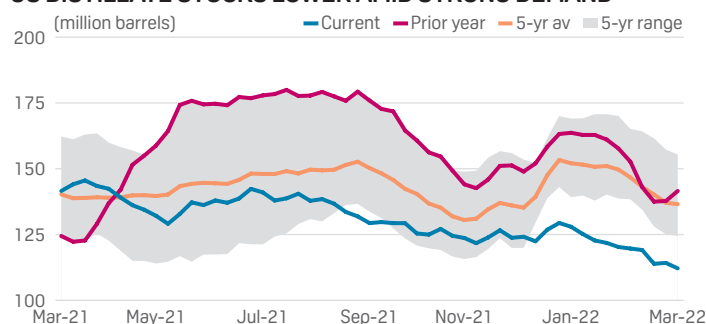
US NET CRUDE INPUTS HIT SEVEN-MONTH HIGH



US CRUDE STOCKS SEE COUNTER-SEASONAL DRAW



US DISTILLATE STOCKS LOWER AMID STRONG DEMAND



Coast WTI MEH cracking margins averaged \$26.25/b to date in March, S&P Global Commodity Insights data shows, up from a February average of \$17.83/b.

Gasoline stocks fall as exports surge

Nationwide gasoline stocks dipped 2.95 million barrels to 238.04 million barrels, led by a 3.45 million-barrel draw on the US Atlantic Coast that put regional stocks at a 14-week low.

Gasoline exports averaged 1.06 million b/d in the week to March 18, up 36% from the week prior and the highest since December 2018.

But inventory pressure from higher exports was mitigated by a 3.4% slide in total product supplied for gasoline, which averaged 8.64 million b/d, falling more than 4% behind the five-year average.

Total distillate stocks fell 2.07 million barrels to 112.14 million barrels as implied demand climbed 22% to 4.52 million b/d.

— [Chris van Moessner](#)

SUBSCRIBER NOTES

Correction

The Gasoline Market Analysis section of the March 22, 2022 issue of Oilgram Price Report should have read as follows:

Japanese refineries halt operations due to earthquake

The Asian gasoline complex strengthened March 22, as Japan's largest refiner ENEOS' 145,000 b/d Sendai refinery in the northeast and 129,000 b/d Chiba refinery in Tokyo Bay were still closed following an earthquake.

It remains unclear when ENEOS will be able to resume operations at the Sendai and the Chiba refineries, S&P Global Commodity Insights reported March 22, citing a company spokesperson.

"It should take some time for the refineries to come back online", a trader said.

Brokers pegged the front-month FOB Singapore 92 RON gasoline crack against Brent swap in the \$14.60-\$14.65/b range at 0300 GMT March 22, down from \$16.23/b at the Asian close March 21, S&P Global data showed.

The physical FOB Singapore 92 RON gasoline crack against front-month ICE Brent crude futures was pegged at \$14.50-\$14.55/b at 0300 GMT, down from \$17.07/b March 21.

Crude oil futures rose in mid-morning trading, as markets remained undersupplied amid buyer aversion to Russian oil.

Gasoline demand is expected to be supported by Ramadan festivities in April, market sources said.

Indonesia was expected to import about 10 million of gasoline in April, and Malaysia was expected to import about 1 million barrels during the same period, according to sources.

Indonesia's Pertamina was seeking up to 200,000 barrels of 92 RON gasoline for loading over April 8-20 from Singapore/Malaysia/Karimun/Brunei in a tender that closed March 21 and remains valid until March 23, market sources said.

Pakistan increases imports from China in Jan-Feb

Pakistan imported 395,000 mt of gasoline from China over January-February, up 26.2% on the year, the customs data showed March 21, making it the only country to have received more fuels from China during that period.

In February alone, Pakistan received 190,000 mt of gasoline from China, up 7.2% on the year.

The increase in imports was in line with the country's growing demand. Pakistan's gasoline consumption growth is expected to be in near double-digits over the next three years due to rising auto sales, despite the push toward cleaner fuels, CEO of Pakistan State Oil Syed Muhammad Taha told S&P Global Commodity Insights in an interview.

Over the next two to three years, motor gasoline demand is expected to increase 8%-10% per annum owing to the sharp increase in economic activity, according to Taha.

In the first two months of the year, China's gasoline imports almost halved by 46.7% on the year to 1.885 million mt.

China is set to reduce its oil product exports by slashing the first batch of export quota allocations for gasoline, gasoil and jet by 56% on the year to 13 million mt for 2022, S&P Global reported earlier.

Looking ahead in March, China's gasoline outflows are more likely to fall as low as 520,000 mt amid tight export quotas, while gasoil exports

are likely to recover slightly to over 500,000 mt as export margin becomes attractive, information collected by S&P Global showed.

Demand for gasoline is expected to rise within regional economies, such as Cambodia and South Korea, as the countries ease COVID-19 travel restrictions amid a pick up tourism demand.

Cambodia waived pre-entry tests, while South Korea will allow fully vaccinated travelers to enter without quarantine from April 1, according to local media.

Demand for gasoline is also expected to be supported by the upcoming Ramadan festivities in April, market sources said.

One market source estimated Indonesia would import 10 million barrels of gasoline in April, while Malaysia was estimated to import 1 million barrels in April.

Philippines top importer

China's gasoil outflows fell to multi-year lows of 197,000 mt in February, down further from 223,000 mt in January.

In February, the Philippines became the top receiver of China's gasoil at 56,000 mt.

Overall exports to the Philippines in the first two months, which amounted to 110,000 mt, however, were still down 85.9% from a year ago.

The decline came amid strict lockdown measures imposed by the Southeast Asian nation to curb the spread of COVID-19, which hurt consumption of gasoil.

Despite that, the Philippines was still the top destination for China's gasoil over January-February, and would continue to take up a large share of China's gasoil exports going forward as the country continues to ease border restrictions.

Meanwhile, South Africa received a rare cargo of 40,000 mt of gasoil in February, the first in 20 months.

NWE-USAC arbitrage open

The Northwest European gasoline market saw flat prices weaken

with the crude complex March 22, while tight supply of blending components in the Mediterranean raised concerns about summer supply, sources said.

Unanimity in the EU on the topic of a ban on Russian oil imports was not reached as Germany and Hungary have rejected a proposed embargo.

Anticipation of a Russian oil ban had previously caused an uptick in crude oil futures, but a wider realization that an EU embargo would take some time brought crude futures, and consequently gasoline flat prices, lower.

The arbitrage from Northwest Europe to the US Atlantic Coast was open for summer-grade gasoline, but supply limitations due to limited refinery output in Europe has left few able to work the arbitrage, according to a Europe-based trader.

Around 93,000 mt of gasoline were expected to load in northwest Europe for export to the US Atlantic Coast in the week started March 21, up 15,000 mt on the prior week, according to Kpler shipping data.

The African Petroleum Producers' Organization conference in South Africa brought news of refinery updates in West Africa.

Angola's Luanda refinery has been undergoing maintenance to increase gasoline production since June 2019 and is expected to finish June 2022, which will increase gasoline production to 450,000 mt/year from 72,000 mt/year.

Steep backwardation in the West African market has made it uneconomical to keep cargoes offshore for long periods of time.

"Offshore volumes have reduced drastically," a market source said.

In the Mediterranean market, naphtha, which is a key blending component used in greater proportions in summer-specification gasoline, was in tight supply due to self-sanctioning of Russian crude and refined oil products.

"The issue is the naphtha more than the gasoline blendstock. There is not enough non-Russian origin naphtha to compensate for Russian barrels," another Europe-based trader said.

EIA WEEKLY SUMMARY, MAR 23 [\(PGA page 95\)](#)

		18Mar22	Change on week	19Mar21
PADD 1 stocks (million barrels)				
Crude	EIAWB00	7.030	-0.439	8.717
Total mogas	EIAIC00	57.206	-3.446	62.958
Conventional mogas	EIAJK00	3.105	+0.433	2.989
Blending components	EIAKC00	54.095	-3.879	59.939
Kero Jet	EIALS00	8.357	-0.755	9.977
Dist \<15 ppm	EIAMH00	25.841	-2.920	42.738
Dist \>15\<500 ppm	EIAMQ00	0.591	-0.050	1.053
Dist \>500 ppm	EIAMZ00	2.073	-0.074	3.051
Dist \>500 ppm New England	EIANA00	0.021	+0.001	0.174
Distillate	EIALY00	28.505	-3.044	46.842
Resid	EIANI00	4.328	-0.201	7.048
PADD 2 stocks (million barrels)				
Crude	EIAWC00	103.039	+2.029	130.860
Crude Cushing, Oklahoma	EIAHW00	25.242	+1.235	46.275
Total mogas	EIAIG00	57.847	-0.687	51.827
Conventional mogas	EIAJL00	4.218	+0.193	5.472
Blending components	EIAKD00	53.629	-0.880	46.355
Kero Jet	EIALT00	7.633	-0.552	6.312
Dist \<15 ppm	EIAML00	28.484	-0.515	26.628
Dist \>15\<500 ppm	EIAMU00	0.265	-0.029	0.373
Dist \>500 pp	EIAND00	0.299	-0.051	0.386
Distillate	EIAMC00	29.048	-0.596	27.387
Resid	EIANM00	1.128	-0.062	1.064
PADD 3 stocks (million barrels)				
Crude	EIAWE00	228.052	-6.562	293.566
Total mogas	EIAIH00	85.415	+0.532	77.836
Conventional mogas	EIAJM00	7.283	+0.494	6.404
Blending components	EIAKE00	78.132	+0.038	71.433
Kero Jet	EIALU00	10.797	+0.164	12.942
Dist \<15 ppm	EIAMM00	32.794	+0.947	43.362
Dist \>15\<500 ppm	EIAMV00	1.156	-0.068	2.113
Dist \>500 pp	EIANE00	4.305	+0.409	4.436
Distillate	EIAMD00	38.255	+1.288	49.911
Resid	EIANN00	16.709	+0.196	17.209

		18Mar22	Change on week	19Mar21
PADD 4 stocks (million barrels)				
Crude	EIAWF00	24.182	+0.516	22.155
Total mogas	EIAII00	8.448	+0.174	8.931
Conventional mogas	EIAJN00	1.842	+0.221	2.172
Blending components	EIAKF00	6.606	-0.047	6.759
Kero Jet	EIALV00	0.609	-0.007	0.676
Dist \<15 ppm	EIAMN00	3.547	-0.199	3.749
Dist \>15\<500 ppm	EIAMW00	0.171	-0.003	0.130
Dist \>500 pp	EIANF00	0.034	-0.001	0.065
Distillate	EIA ME00	3.752	-0.203	3.943
Resid	EIANO00	0.248	-0.011	0.197
PADD 5 stocks (million barrels)				
Crude	EIAWI00	51.096	+1.947	47.412
Total Mogas	EIAIJ00	29.126	+0.479	30.726
Conventional mogas	EIAJO00	1.876	-0.119	2.681
Blending components	EIAKG00	27.236	+0.599	28.028
Kero Jet	EIALW00	8.959	-1.262	9.292
Dist \<15 ppm	EIAMO00	11.624	+0.420	12.391
Dist \>15\<500 ppm	EIAMX00	0.287	+0.031	0.299
Dist \>500 pp	EIANG00	0.664	+0.033	0.780
Distillate	EIAMF00	12.574	+0.483	13.470
Resid	EIANP00	4.243	-0.125	5.777
Total US stocks (million barrels)				
Crude	EIAWA00	413.399	-2.508	502.711
Total mogas	EIAIB00	238.043	-2.948	232.279
Conventional mogas	EIAJJ00	18.324	+1.222	19.717
Blending components	EIAKB00	219.699	-4.169	212.513
Kero Jet	EIALR00	36.356	-2.412	39.199
Dist \<15 ppm	EIAMG00	102.290	-2.267	128.867
Dist \>15\<500 ppm	EIAMP00	2.470	-0.119	3.967
Dist \>500 ppm	EIAMY00	7.375	+0.316	8.719
Distillate	EIALX00	112.135	-2.071	141.553
Resid	EIANH00	26.656	-0.203	31.294
Total US inputs, imports, production (million b/d) (PGA page 88)				
Crude inputs	EIABT00	15.878	+0.277	14.389
Crude imports	EIAOE00	6.486	+0.091	5.622
Mogas imports	EIAOL00	0.721	+0.190	0.939
Distillate imports	EIASD00	0.172	-0.050	0.664
Mogas production	EIADX00	9.804	+0.424	8.577
Distillate production	EIAGL00	4.979	+0.034	4.601

PRODUCT PRICE ASSESSMENTS

ASIA, MAR 23

			Mid	Change
Singapore (PGA page 2002)				
(\$/barrel)				
Naphtha	PAAAP00	108.00–108.04	108.020	+2.820
Jet kerosene	PJABF00	143.12–143.16	143.140	+5.400
Gasoil	POABC00	147.69–147.73	147.710	+3.520
Gasoil 10 ppm	AAOV00	147.69–147.73	147.710	+3.520
Gasoil 50 ppm	AAPPF00	146.21–146.25	146.230	+3.450
Gasoil 0.05% S	AAFEX00	143.34–143.38	143.360	+3.850
Gasoil 0.25% S	AACUE00	140.44–140.48	140.460	+3.160
Gasoil 50 ppm disc/prem	AAPPH00	4.35–4.39	4.370	+0.230
Mogas 92 unl	PGAEE00	129.44–129.48	129.460	+0.190
Mogas 95 unl	PGAEE00	133.39–133.43	133.410	+0.190
Mogas 97 unl	PGAMS00	134.70–134.74	134.720	+0.190
CFR Naphtha	AAOVF00		108.250	+3.330
Naphtha pap. (bal month)	AAPLD00	NA–NA	NA	NANA
Naphtha pap. (Apr)	PAAAQ00	107.13–107.17	107.150	+3.350
Naphtha pap. (May)	PAAAR00	105.78–105.82	105.800	+3.150
Kerosene pap. (bal month)	AAPLE00	143.42–143.46	143.440	+8.060
Kerosene pap. (Apr)	PJABS00	135.27–135.31	135.290	+4.910
Kerosene pap. (May)	PJABT00	127.17–127.21	127.190	+2.790
Gasoil pap. (bal month)	AAPLF00	148.57–148.61	148.59	+2.390
Gasoil pap. (Apr)	POAFC00	141.67–141.71	141.690	+3.490
Gasoil pap. (May)	POAFG00	131.42–131.46	131.440	+2.240
(\$/mt)				
FO 180 CST 2%	PUAXS00	693.26–693.30	693.280	+23.490
HSFO 180 CST	PUADV00	678.00–678.04	678.020	+22.970
180 CST disc/premium	AAGZF00	10.56–10.60	10.580	+1.000

CHINA, MAR 23 (PGA page 2010)

			Mid	Change
(\$/mt)				
South China FOB				
Unl 92 RON	AAICW00	1107.50–1111.50	1109.500	+1.500
South China, C&F				
Jet kerosene	PJABQ00	1118.25–1122.25	1120.250	+38.000
Gasoil	POAFA00	1089.50–1093.50	1091.500	+27.250
Hong Kong				
Fuel oil 380 CST	PUAER00	667.50–668.50	668.000	+20.500

FUJAIK, FOB, MAR 23 (PGA page 2018)

			Mid	Change
(\$/mt)				
Naphtha	NFJSA00		977.920	+13.510
HSFO 380 CST	AFUJQ00		670.510	+21.840
(\$/barrel)				
Gasoline 95 unleaded	AFUJA00		131.710	+0.470
Gasoline 92 unleaded	RFJFS00		127.200	+0.740
Kerosene	AFUJF00		135.940	+4.210
Gasoil 10 ppm	AFUJP00		141.940	+2.840
Gasoil	AFUJK00		141.940	+2.840

			Mid	Change
Singapore (continued) (PGA pages 2002 & 2655)				
(\$/mt)				
HSFO 380 CST	PPXDK00	651.76–651.80	651.780	+23.010
HSFO 180 CST pap. (bal month)	AAPML00	673.98–674.02	674.00	+23.250
HSFO 180 CST pap. (Apr)	PUAXZ00	667.23–667.27	667.250	+22.250
HSFO 180 CST pap. (May)	PUAYF00	655.73–655.77	655.750	+20.250
MTBE	PHALF00	1174.00–1176.00	1175.000	+24.000
C&F Japan (PGA page 2006)				
(\$/barrel)				
Jet kerosene	PJAAN00	141.44–141.48	141.460	+4.810
Mogas unl	PGACW00	133.43–133.47	133.450	+0.150
(\$/mt)				
Naphtha	PAAAD00	993.25–1000.75	997.000	+31.375
Nph 1st 1/2 May	PAAAE00	1006.25–1006.75	1006.500	+25.000
Nph 2nd 1/2 May	PAAAF00	1000.25–1000.75	1000.500	+29.750
Nph 1st 1/2 Jun	PAAAG00	993.25–993.75	993.500	+33.000
FOB Japan				
(\$/barrel)				
Gasoil	POJAP00		144.510	+3.720
C&F Australia (PGA page 2004)				
(\$/barrel)				
Mogas 92 unl	AACZF00	135.61–135.65	135.630	+0.140
Mogas 95 unl	AACZH00	139.56–139.60	139.580	+0.140
Jet kerosene	AAFIY00	149.75–149.79	149.770	+5.340
Gasoil 10 ppm	AAQUD00	154.73–154.77	154.750	+3.460

ARAB GULF, FOB, MAR 23 (PGA page 2004)

			Mid	Change
(\$/mt)				
Naphtha	PAAAA00	944.40–951.90	948.150	+31.105
Naphtha LR2	AAIDA00	950.17–957.67	953.920	+31.375
HSFO 180 CST	PUABE00	658.32–658.36	658.340	+22.830
HSFO 380 CST	AAIDC00	632.08–632.12	632.100	+22.870
(\$/barrel)				
95 RON unleaded	AAICY00	129.55–129.59	129.570	+0.190
92 RON unleaded	AAGJA00		125.620	+0.190
Kerosene	PJAAA00	139.73–139.77	139.750	+5.380
Gasoil 10 ppm	AAIDT00	144.09–144.13	144.110	+3.500
Gasoil 0.05% S	AAFEZ00	143.09–143.13	143.110	+3.500
Gasoil 0.25% S	AACUA00	141.59–141.63	141.610	+3.500
Gasoil	POAAT00	144.09–144.13	144.110	+3.500

ASIA PRODUCT PREMIUM/DISCOUNT ASSESSMENTS

			Mid	Change
Mar 23				
MOP* Singapore (PGA page 2002)				
(\$/barrel)				
Jet	PJACU00	7.70/7.74	7.720	+0.650
Gasoil 0.25% S	AACQI00	-1.42/-1.38	-1.400	-0.060
Gasoil	POAIC00	5.83/5.87	5.850	+0.300
CFR Naphtha	AAOVG00		1.080	+0.020
(\$/mt)				
380 CST	PPXDL00	10.12/10.16	10.140	+2.990
MOP* Arab Gulf (PGA page 2004)				
(\$/barrel)				
Jet	PJACV00	5.88/5.92	5.900	0.000
Gasoil 10 ppm	AAIDU00	6.18/6.22	6.200	-0.050
Gasoil 0.25% S	AACUC00	3.68/3.72	3.700	-0.050
Gasoil	POAID00	6.18/6.22	6.200	-0.050
380 CST**	PPXDM00	-26.26/-26.22	-26.240	+0.040
(\$/mt)				
HSFO 180 CST	AAAJA00	49.98/50.02	50.000	+2.000
HSFO 380 CST	AAJJB00	47.98/48.02	48.000	+2.000
MOP* Japan (PGA page 2006)				
(\$/barrel)				
Naphtha	PAADI00	9.25/9.75	9.500	-0.250
MOP* West India (PGA page 2012)				
(\$/mt)				
Gasoline (92 RON)	AARBQ00		1076.340	+1.610
Gasoline (95 RON)	AAQWI00		1109.920	+1.620
Naphtha	AAQWK00		958.420	+31.370
Jet kero	AAQWM00		1106.740	+42.660
Gasoil (10 ppm)	AAQWO00		1076.370	+26.220
Gasoil (500 ppm)	AAQWP00		1043.960	+28.680
Gasoil (2500 ppm)	AAQWS00		1022.360	+23.540
(\$/barrel)				
Gasoline (92 RON)	AARBQ00		126.630	+0.190
Gasoline (95 RON)	AAQWH00		130.580	+0.190
Naphtha	AAQWJ00		106.490	+3.480
Jet kero	AAQWL00		140.090	+5.400
Gasoil (10 ppm)	AAQWN00		144.480	+3.520
Gasoil (500 ppm)	AAQWP00		140.130	+3.850
Gasoil (2500 ppm)	AAQWR00		137.230	+3.160

*Mean of Platts. **=Differential to FOB Arab Gulf HSFO 180 CST.

PLATTS INDEX, MAR 23 (PGA page 115)

			Change
Platts Jet Fuel Index	PJGL000	440.67	+26.530

The Platts Jet Fuel Index is calculated using daily assessments of Jet fuel spot prices in relevant regional centers. These values are compared with average spot prices in the base period (Index value of year 2000 = 100%) to generate a percentage figure reflecting the overall rise or fall in markets compared to the base period.

PRODUCT PRICE ASSESSMENTS

EUROPEAN BULK, MAR 23

(\$/mt)			Mid	Change			Mid	Change
(PGA page 1114)								
	Cargoes FOB Med basis Italy					Cargoes CIF Med basis Genoa/Lavera		
Prem unl 10 ppm	AAWZA00	1109.00–1109.50	1109.250	+36.750	AAWZB00	1122.25–1122.75	1122.500	+36.750
Naphtha physical	PAAA100	966.75–967.25	967.000	+24.000	PAAAH00	984.50–985.00	984.750	+24.000
Jet av. fuel	AAIDL00	1273.25–1273.75	1273.500	+72.500	AAZBN00	1297.00–1297.50	1297.250	+72.500
ULSD 10 ppm	AAWYY00	1256.50–1257.00	1256.750	+75.250	AAWYZ00	1278.75–1279.25	1279.000	+75.250
Gasoil 0.1%	AAVJ100	1180.00–1180.50	1180.250	+69.750	AAVJ300	1209.25–1209.75	1209.500	+69.750
1% fuel oil	PUAAK00	749.50–750.00	749.750	+37.000	PUAAJ00	761.25–761.75	761.500	+37.000
3.5% fuel oil	PUAAZ00	650.50–651.00	650.750	+46.000	PUAAY00	662.00–662.50	662.250	+46.000
(PGA page 1110)								
	Cargoes FOB NWE					Cargoes CIF NWE basis ARA		
Gasoline 10 ppm					AAXFQ00	1172.00–1172.50	1172.250	+53.000
Naphtha swaps					PAAAJ00	1011.25–1011.75	1011.500	+25.500
Naphtha physical					PAAAL00	997.25–997.75	997.500	+24.000
Jet kerosene	PJAAV00	1284.25–1284.75	1284.500	+72.500	PJAAU00	1298.50–1299.00	1298.750	+72.500
ULSD 10 ppm	AAVBF00	1269.50–1270.00	1269.750	+67.750	AAVBG00	1296.25–1296.75	1296.500	+65.500
Diesel 10 ppm NWE	AAWZD00	1273.25–1273.75	1273.500	+67.500	AAWZC00	1301.25–1301.75	1301.500	+65.250
Diesel 10 ppm UK					AAVBH00	1305.00–1305.50	1305.250	+64.750
Diesel 10 ppm UK cargoes					AUKDA00		1305.250	+64.750
CIF NWE - original (French) spec								
Gasoil 0.1%	AAVWR00	1191.25–1191.75	1191.500	+65.750	AAVWS00	1213.75–1214.25	1214.000	+65.750
1% fuel oil	PUAAM00	736.25–736.75	736.500	+37.000	PUAAL00	751.25–751.75	751.500	+37.000
3.5% fuel oil	PUABB00	626.75–627.25	627.000	+47.000	PUABA00	646.25–646.75	646.500	+47.000

(PGA pages 1112 & 1380)

Barges FOB Rotterdam				
98 RON unl	AAKOD00	1185.50–1186.00	1185.750	+44.500
Prem unl	PGABM00	1139.00–1139.50	1139.250	+53.750
Reformate	AAAXP00		1151.750	+42.500
Eurobob	AAQZV00	1113.50–1114.00	1113.750	+44.500
E10 Eurobob	AGEFA00		1127.000	+52.750
Naphtha physical	PAAAM00	993.25–993.75	993.500	+24.000
Jet kerosene	PJABA00	1346.50–1347.00	1346.750	+75.750
Diesel 10 ppm*	AAJUS00	1286.75–1287.25	1287.000	+67.750
Gasoil 50 ppm	AAUQC00	1286.75–1287.25	1287.000	+67.750
Gasoil 0.1%*	AAVWT00	1199.50–1200.00	1199.750	+66.500
DMA MGO 0.1%*	LGARD00		1205.000	+51.750
1% fuel oil	PUAAP00	735.00–735.50	735.250	+37.000
3.5% fuel oil	PUABC00	648.50–649.00	648.750	+47.000
3.5% 500 CST fuel oil	PUAGN00	643.50–644.00	643.750	+47.000
380 CST	PUAYW00	699.50–700.50	700.000	+32.000

*FOB Amsterdam-Rotterdam-Antwerp.

WEST AFRICA PRODUCTS (\$/mt), MAR 23

		Mid	Change
West Africa cargoes (PGA page 1122)			
FOB NWE			
Gasoline	AAKUV00	1141.250	+34.000
CIF West Africa			
Gasoline	AGNWC00	1175.250	+33.750
FOB STS West Africa			
Gasoil 0.3%	AGNWD00	1327.750	+69.500

RENEWABLE FUELS (\$/mt), MAR 23 (PGA pages 1414, 483 and 2414)

			Change
Northwest Europe			
SAF	BJNWA00	2942.327	+239.629
HVO	HVNWA00	2703.707	+213.968
USWC			
SAF w/ credits	ASAFQ00	2428.732	-14.182
SAF w/o credits	ASAFB00	995.251	-16.905
RD w/ credits	ARDFA00	2336.432	-8.180
RD w/o credits	ARDFB00	841.764	-11.062
Southeast Asia			
SAF (PFAD)	ASFQA00	2602.260	+29.300
HVO (PFAD)	HVSAB00	2394.210	+27.240
North Asia			
SAF (UCO)	ASFAC00	2632.780	+102.300
HVO (UCO)	HVNAA00	2425.190	+94.820

PLATTS EURO DENOMINATED PRODUCT ASSESSMENTS

Mar 23			Mid	Change
Cargoes CIF NWE/basis ARA (€/mt) (PGA page 1116)				
Nap phy	AAQCE00	906.34–906.80	906.571	+22.616
Jet	AAQCF00	1180.13–1180.59	1180.360	+66.903
Cargoes FOB NWE (PGA page 1116)				
1%	AAQCG00	669.14–669.59	669.363	+34.205
Barges FOB Rotterdam (€/mt) (PGA page 1118)				
Prem unl	AAQCH00	1035.17–1035.63	1035.399	+49.746
10 ppm*	AAQCI00	1169.45–1169.91	1169.681	+62.580
Gasoil 0.1%*	AAVWY00	1090.16–1090.61	1090.384	+61.373
DMA MGO*	LGARE00		1095.156	+47.984
3.50%	AAQCK00	589.39–589.84	589.612	+43.212
3.50% 500 CST	PUAGO00	584.84–585.30	585.068	+43.208
			Mid	Change
Cargoes CIF West Africa (€/mt) (PGA page 1116)				
Gasoline	AANWC00		1068.118	+31.616
Cargoes FOB NWE West Africa (€/mt) (PGA page 1116)				
Gasoline	AGNWA00		1037.217	+31.814
Cargoes FOB STS West Africa (€/mt) (PGA page 1116)				
Gasoil 0.3%	AGNWE00		1206.716	+64.203
Euro/US\$ forex rate: 1.1003. Platts Euro denominated European and US product assessments are based on market values and a Euro/US\$ forex rate at 4:30 PM local London time. *FOB Amsterdam-Rotterdam-Antwerp.				

Euro/US\$ forex rate: 1.1003. Platts Euro denominated European and US product assessments are based on market values and a Euro/US\$ forex rate at 4:30 PM local London time. *FOB Amsterdam-Rotterdam-Antwerp.

EUROPEAN FEEDSTOCKS AND BLENDSTOCKS

				Change
CIF Northwest Europe cargo (\$/mt) (PGF page 1760)				
VGO 0.5-0.6%	AAHMZ00	908.50–909.50	909.000	+44.000
VGO 2%	AAHND00	896.00–897.00	896.500	+44.250
FOB Northwest Europe cargo (\$/mt)				
VGO 0.5-0.6%	AAHMX00	888.50–889.50	889.000	+44.250
VGO 2%	AAHNB00	875.75–876.75	876.250	+44.000
Straight Run 0.5-0.7%	PKABA00	839.75–840.75	840.250	+37.000
FOB Black Sea cargo (\$/mt)				
VGO 0.8%	ABBAD00		886.750	+44.000
VGO 2%	ABBAC00		871.250	+43.500
CIF Mediterranean cargo (\$/mt)				
Straight Run 0.5-0.7%	AAJNT00		813.750	+28.250
VGO 0.8%	ABBAB00		907.750	+44.250
VGO 2%	ABBAA00		892.000	+43.500
FOB Rotterdam barge (\$/mt)				
MTBE*	PHALA00	1196.75–1197.25	1197.000	+35.500
VGO 0.5-0.6%	AAHNF00	875.50–876.50	876.000	+44.250
VGO 2%	AAHNI00	862.75–863.75	863.250	+44.000
*FOB Amsterdam-Rotterdam-Antwerp.				

*FOB Amsterdam-Rotterdam-Antwerp.

PRODUCT PRICE ASSESSMENTS

NEW YORK, MAR 23 (PGA page 152)

			Mid	Change				Mid	Change			Mid	Change		
	Cargo (¢/gal)				RVP		Barge (¢/gal)			RVP		Differentials to NYMEX			
Unl 87	AAMHG00	319.67–319.77	319.720	+3.050	AAMHGRV	13.5									
CBOB							AAWBL00	323.32–323.42	323.370	+9.050	AAWBLRV	13.5	AANYX14	-20.500	-1.750
Prem CBOB							AAWLC00	369.57–369.67	369.620	+27.450	AAWLCRV	9.0	AANYX16	25.750	+16.650
Unl RBOB	AAVKS00	324.82–324.92	324.870	+9.550	AAVKSrv	13.5	AAMGV00	323.32–323.42	323.370	+9.550	AAMGVRV	13.5	AANYX15	-20.500	-1.250
Prem RBOB							AAMGY00	369.57–369.67	369.620	+24.900	AAMGYRV	7.4	AANYX17	25.750	+14.100
Jet fuel							PJAAW00	410.68–410.78	410.730	+38.560			ADIGA00	-0.750	+13.500
LS jet kero							PJABJ00	421.68–421.78	421.730	+25.060			ADIHA00	10.250	0.000
ULS kero							AAVTI00	427.68–427.78	427.730	+25.060			ADJKH00	16.250	0.000
No. 2							POAEG00	366.43–366.53	366.480	+12.810			ADIAO00	-45.000	-12.250
ULSD							AATGX00	428.93–429.03	428.980	+25.060			ADIZA00	17.500	0.000
ULS heating oil							AAXPX00		409.230	+22.560			ADIAQ00	-2.250	-2.500
	Cargo ex-duty (¢/gal)*					RVP									
Unl 87	AASAA00	302.51–302.61	302.560	+2.870	AASAArv	13.5									
Unl RBOB	AASAF00	307.65–307.75	307.700	+9.360	AASAFrv	13.5									
	(\$/barrel)							Differential vs 1s strip(\$/barrel)							
No. 6 1% S max	PUAA000	117.86–117.88	117.870	+5.470			AAUGD00	1.13–1.15	1.140						
No. 6 1% S max 1s strip	AAUGG00	116.72–116.74	116.730	+5.470											
USAC HSFO	PUAAX00	107.41–107.43	107.420	+4.610			AAUGF00	-9.32–9.30	-9.310						
No. 6.1 S max pap bal M	AARZS00	NA–NA	NA	NANA											
No. 6 1.0% S pap 1st M	PUAXD00	115.85–115.95	115.900	+5.500											
No. 6 1.0% S pap 2nd M	PUAXF00	113.25–113.35	113.300	+5.350											
No. 6 1.0% S pap qtrly	PUAXG00	113.28–113.38	113.330	+5.350											

*These assessments reflect gasoline cargoes sold on a delivered, ex-duty basis New York, excluding import duty and import taxes/fees.

USAC CPL LINDEN*, MAR 23 (PGA page 410)

(¢/gal)		Mid	Change		Differentials to NYMEX	Change		Cycle		RVP	
Unl 87	ACXPW00	327.720	+5.650		AANYX40	-16.150	-5.150	ACRQWCY	15	ACRQWRV	11.5
CBOB	ABXPW00	321.620	+5.650		AANYX41	-22.250	-5.150	ABRQWCY	15	ABRQWRV	12.5
RBOB	ADXPW00	323.370	+5.550		AANYX42	-20.500	-5.250	ADRQWCY	15	ADRQWRV	11.5
Jet kero 54	AAXPV00	410.230	+38.560		ADITJA00	-1.250	+13.500	AAXPVCY	14		
ULS heating oil	AAXPU00	409.230	+22.560		ADITAR00	-2.250	-2.500	AAXPUCY	14		
ULSD	AAXPW00	423.230	+26.560		ADLAA00	11.750	+1.500	AAXPWCY	14		

*Assessments reflect shipments on the next full pipeline cycle after the prompt cycle

PRODUCT PRICE ASSESSMENTS

U.S. BUCKEYE PIPELINE, MAR 23 (PGA page 310)

(¢/gal)			Mid	Change		RVP	Differentials to NYMEX	Change
Unl RBOB	AAMHB00	323.32-323.42	323.370	+9.550	AAMHBRV	13.5	AANYX35	-20.500 -1.250
Prem RBOB	AAMHZ00	369.57-369.67	369.620	+24.900	AAMHZRV	7.4	AANYX36	25.750 +14.100
CBOB	AAPSY00	323.32-323.42	323.370	+9.050	AAPSYRV	13.5	AANYX33	-20.500 -1.750
CBOB prem	AAPSZ00	369.57-369.67	369.620	+27.450	AAPSZRV	9.0	AANYX34	25.750 +16.650
ULSD	AATHF00	428.93-429.03	428.980	+25.060			ADIYA00	17.500 0.000
Jet fuel	AAJNL00	410.68-410.78	410.730	+38.560			ADIEA00	-0.750 +13.500
LS jet/kero	AAJNN00	421.68-421.78	421.730	+25.060			ADIFA00	10.250 0.000

RVP

Laurel

Unl CBOB	AAUAS00	323.32-323.42	323.370	+9.050	AAUASRV	13.5	AANYX29	-20.500 -1.750
Prem CBOB	AAUAT00	365.57-365.67	365.620	+26.150	AAUATRV	10.0	AANYX30	21.750 +15.350

All RVP references are after ethanol

CHICAGO PIPELINE, MAR 23 (PGA page 160)

(¢/gal)			Mid	Change		RVP	Differentials to NYMEX	Change
Prem. unl 91	PPASQ00	357.32-357.42	357.370	+10.800	PPASQRV	9.0	AANY100	13.500 0.000
CBOB	AAREL00	333.82-333.92	333.870	+10.800	AARELRV	9.0	AANY101	-10.000 0.000
PBOB	AAUEU00	367.32-367.42	367.370	+10.800	AAUEURV	7.4	AANY103	23.500 0.000
RBOB	PPARH00	343.82-343.92	343.870	+10.800	PPARHRV	7.4	AANY102	0.000 0.000
Jet fuel	PJAAF00	391.43-391.53	391.480	+25.060			ADILA00	-20.000 0.000
ULS No. 1	PJACD00	411.43-411.53	411.480	+23.560				
ULSD	AATHA00	388.93-389.03	388.980	+23.560			ADLAI00	-22.500 -1.500

CHICAGO BUCKEYE COMPLEX, MAR 23 (PGA page 160)

(¢/gal)			Mid	Change		RVP	Differentials to NYMEX	Change
CBOB	ACBAA00		338.870	+10.800	ACBAARV	9.0	ACBAB00	-5.000 0.000
RBOB	ACBAC00		344.120	+10.800	ACBACRV	7.4	ACBAD00	0.250 0.000
ULSD	ACBAE00		391.480	+23.060			ACBAF00	-20.000 -2.000

CHICAGO WOLVERINE PIPELINE, MAR 23 (PGA page 160)

(¢/gal)			Mid	Change		RVP	Differentials to NYMEX	Change
CBOB	AGCWA00		334.870	+10.800	AGCWERV	9.0	AGCWB00	-9.000 0.000
ULSD	AGCWC00		389.980	+23.060			AGCWD00	-21.500 -2.000

GROUP THREE, MAR 23 (PGA page 160)

(¢/gal)			Mid	Change		RVP	Differentials to NYMEX	Change
Sub-octane	AAXIX00	320.82-320.92	320.870	+10.800	AAXIXRV	8.5	AANYX01	-23.000 0.000
Prem. unleaded	PGABD00	350.07-350.17	350.120	+10.800	PGABDRV	8.5	AANYX02	6.250 0.000
ULSD	AATHB00	397.43-397.53	397.480	+26.810			ADLAB00	-14.000 +1.750
Jet fuel	PJAAI00	397.93-398.03	397.980	+25.060			ADIKA00	-13.500 0.000
No. 1	PJACB00	415.68-415.78	415.730	+26.810				

ATLANTIC RESID/CONTRACT CARGOES POSTED PRICES, MAR 23 (PGA page 564)

(\$/barrel)		No. 4 Fuel
Global		
Boston 0.5%	PRALB00	170.60
Boston 1.0%	PRALD00	158.70
		No. 6 Fuel
Boston 0.5%	PRAMN00	156.20
Boston 1.0%	PRAMD00	132.40

Source: Global Montello Group Corp.

MARINE FUEL (PGA page 30)

		\$/mt	Change
0.5% FOB Singapore cargo	AMFSA00	873.250	+10.770
0.5% FOB Fujairah cargo	AMFFA00	906.690	+13.160
0.5% FOB Rotterdam barge	PUMFD00	847.250	+36.000
0.5% FOB US Gulf Coast barge	AUGMB00	898.000	+32.750
0.5% Divd US Atlantic Coast barge	AUAMB00	901.250	+32.750
0.5% FOB Mediterranean cargo	MF FMM00	861.750	+36.000
0.5% CIF Mediterranean cargo	MFCMM00	872.250	+36.000
		\$/barrel	
0.5% FOB US Gulf Coast barge	AUGMA00	141.420	+5.160
0.5% Divd US Atlantic Coast barge	AUAMA00	141.930	+5.160
		vs FO 380 MOPS strip (\$/mt)	
0.5% FOB Singapore cargo	AMOPA00	231.610	-9.250
		vs MF 0.5% MOPS strip (\$/mt)	
0.5% FOB Singapore cargo	FOFSB00	24.270	-0.250
0.5% FOB Singapore Bal mo	FOFS000	869.250	+9.250
0.5% FOB Singapore M1	FOFS001	848.500	+12.000
0.5% FOB Singapore M2	FOFS002	819.000	+12.250
0.5% FOB Singapore MOPS Strip	FOFSA00	848.980	+11.020

PRODUCT PRICE ASSESSMENTS

U.S. GULF COAST, MAR 23

		Mid	Change		Mid	Change				Mid	Change		
Houston (PGA page 156)													
	Pipeline (¢/gal)			Differential to NYMEX			Cycle	RVP		Waterborne (¢/gal)			RVP
Unl 87	PGACT00	337.32-337.42	337.370+11.300	AANY105	-6.500	+0.500	PGACTCY 18	PGACTRV 9.0	PGACU00	339.32-339.42	339.370+11.300	PGACURV 9.0	
Unl 89	PGAAY00	343.72-343.82	343.770+11.300				PGAAYCY 18	PGAAYRV 9.0	PGAAZ00	345.72-345.82	345.770+11.300	PGAAZRV 9.0	
Prem unl 93	PGAJB00	353.32-353.42	353.370+11.300	AANYX76	9.500	+ 0.500	PGAJBCY 18	PGAJBRV 9.0	PGAIX00	355.32-355.42	355.370+11.300	PGAIXRV 9.0	
CBOB 87	AARQU00	327.57-327.67	327.620+11.800	AANYX77	-16.250	+1.000	AARQUCY 18	AARQURV 10.0	AAWES00	329.57-329.67	329.620+11.800	AAWESRV 10.0	
CBOB 93	AARQV00	347.32-347.42	347.370+11.800	AANYX78	9.500	+ 0.500	AARQVCY 18	AARQVRV 10.0					
RBOB 83.7	AAMFB00	338.57-338.67	338.620+12.050	AANYX79	-5.250	+1.250	AAMFBCY 18	AAMFBRV 7.4					
RBOB 91.4	AAMNG00	354.57-354.67	354.620 +9.550	AANYX80	10.750	-1.250	AAMNGCY 18	AAMNGRV 7.4					
Jet/kero 54	PJABO00	392.43-392.53	392.480+30.560	ADIAS00	-19.000	+5.500	PJABOCY 18		PJABM00	393.93-394.03	393.980+30.560		
Jet/kero 55	PJABP00	393.43-393.53	393.480+30.560	ADIAZ00	-18.000	+5.500	PJABPCY 18		PJABN00	394.93-395.03	394.980+30.560		
ULS Kero	AAVTL00	401.43-401.53	401.480+30.560	ADICA00	-10.000	+5.500	AAVTLCY 18		AAVTK00	402.93-403.03	402.980+30.560		
ULSD	AATGY00	404.18-404.28	404.230+26.810	ADIQA00	-7.250	+1.750	AATGYCY 18		AATGZ00	407.43-407.53	407.480+26.810		
No. 2	POAED00	386.43-386.53	386.480+23.160	ADIAA00	-25.000	-1.900	POAEDCY 18		POAEE00	390.93-391.03	390.980+23.160		
ULS Heating Oil	AAXFD00	390.68-390.78	390.730+26.810	ADIAI00	-20.750	+1.750	AAXFDCY 18						
Waterborne vs prompt pipeline (¢/gal)													
Jet Spread	AUSGL00		1.500 0.000										
ULSD Spread	AUSGN00		3.250 0.000										
No. 2 Spread	AUSGM00		4.500 0.000										
FOB Cargo (¢/gal) FOB Cargo (\$/mt)													
Export ULSD	AAXRV00	381.770+23.480		AAXRW00	1194.560	+73.470							
FOB Cargo vs forward pipe strip (¢/gal)													
ULSD Mexico	AUSGH00	3.300 0.000											
ULSD Brazil	AUSGA00	3.450 0.000											
ULSD EN590	AUSGB00	3.550 0.000											
Jet A	AUSGC00	1.500 0.000											
Jet A-1	AUSGD00	2.000 0.000											
Colonial Pipeline Gasoline Line Space (¢/gal)													
Line 1	AAXTA00	1.000 -0.500					AAXTACY 18						
Line 3	AAXTB00	0.000 0.000					AAXTBCY 18						
Line 1+3	AAXTC00	1.000 -0.500					AAXTCCY 18						
Colonial Pipeline Distillates Line Space (¢/gal)													
Line 2	AAXTD00	-0.200 0.000					AAXTDCY 18						
Line 3	AAXTE00	0.000 0.000					AAXTECY 18						
Line 2+3	AAXTG00	-0.200 0.000					AAXTGCY 18						
(\$/barrel) Differential vs USGC HSFO strip (\$/barrel) USGC HSFO Strip (\$/barrel)													
Slurry Oil	PPAPW00	114.78-114.80	114.790 +4.610	AAUGS00	12.22-12.24	12.230 0.000							
No. 6 1.0% S 6 API	PUAAT00	116.26-116.28	116.270 +5.460	AAUGT00	13.70-13.72	13.710 +0.850							
USGC HSFO	PUAZF00	101.78-101.80	101.790 +4.610	AAUGU00	-0.78--0.76	-0.770 0.000			AAUGW00	102.55-102.570	102.560 +4.610		
RMG 380	PUBDM00	101.78-101.80	101.790 +4.610	AAUGV00	-0.78--0.76	-0.770 0.000							
USGC HSFO swap BalMo(Mar)	AARZT00	NA-NA	NA NANA										
USGC HSFO swap M1(Apr)	PUAXJ00	102.25-102.35	102.300 +4.650										
USGC HSFO swap M2(May)	PUAXL00	101.60-101.70	101.650 +4.700										
USGC HSFO swap Q1(Q2 22)	PUAXN00	101.53-101.63	101.580 +4.680										
(PGA page 330)													
USGC RVP Adjustments (¢/gal)													
CBOB -1 psi	AGLOB00		4.200 +0.100										
Prem CBOB -1 psi	AGLOC00		4.200 +0.100										
CBOB +1 psi	AGLOA00		-2.200 -0.050										
Prem CBOB +1 psi	AGHOA00		-2.200 -0.050										

PRODUCT PRICE ASSESSMENTS

U.S. GULF COAST

		Mid	Change			Mid	Change			Mid	Change
(PGF page 760)											
		Waterborne (¢/gal)				Diff vs USGC waterborne 87 (¢/gal)					
FOB Naphtha Cargo	AAXJP00	269.95	-270.05	270.000	+8.000						
FOB Naphtha Cargo (\$/mt)	AAXJU00	1020.55	-1020.65	1020.600	+30.240						
Naphtha USGC vs	ANAPD00			23.750	-8.500						
Naphtha MOPJ (\$/mt)											
DAP LSR Naphtha Parcel	AAXQK00			270.000	+8.000						
DAP LSR Naphtha Parcel (\$/mt)	AAXQM00			1082.700	+32.080						
DAP LSR Naphtha Parcel diff**	AAXQN00			10.000	+10.000						
Naphtha barge	AALPG00	273.82	-273.92	273.870	+8.800	AASGZ00	-65.500				
Heavy naphtha barge	AALPI00	276.82	-276.92	276.870	+8.800	AASHD00	-62.500				
MTBE	PHAKX00	370.90	-371.00	370.950	+8.770						
										Diff vs USGC pipeline 87 (¢/gal)	
Alkylate*	AAXBA00			349.550	+11.100	AAFIE00	11.750	0.000	AAXBD00	13.750	0.000
Raffinate*	AAXBB00			285.300	+11.100	AAJMU00	-52.500	0.000	AAXBE00	-50.500	0.000
Reformate*	AAXBC00			375.800	+11.100	AAJMV00	38.000	0.000	AAXBF00	40.000	0.000

LSR = Light Straight Run. *=DAP barge. **= Diff to Mont Belvieu non-Targa natural gasoline.

Note: Platts line space assessments reflect the physical trade of gasoline or distillates at two locations agreed upon by the parties along the Colonial Pipeline between Pasadena, Texas, and Linden, New Jersey. The assessments represent the premium or discount paid by a buyer while taking refined product off the line at one location while giving product to the seller at another.

U.S. GULF COAST PIPELINE CYCLES, MAR 23 (PGA page 156)

(¢/gal)		Pipeline	Mid	Cycle	RVP			Pipeline	Mid	Cycle	RVP		
Gasoline													
Unl-87	AAELC00	337.32-337.42	337.370	AAELCCY	18	AAELCRV	9.0	ULSD	AAUJW00	400.18-400.28	400.230	AAUJWCY	19
Unl-87	AAELD00	336.47-336.57	336.520	AAELDCY	19	AAELDRV	9.0	ULSD	AAUJX00	396.18-396.28	396.230	AAUJXCY	20
Unl-87	AAELE00	335.62-335.72	335.670	AAELECY	20	AAELERV	9.0	ULSD	AAUJY00	392.18-392.28	392.230	AAUJYCY	21
Unl-87	AAELF00	334.77-334.87	334.820	AAELFCY	21	AAELFRV	9.0	ULSD	AAUJZ00	388.18-388.28	388.230	AAUJZCY	22
Unl-87	AAELG00	333.92-334.02	333.970	AAELGCV	22	AAELGRV	9.0	ULSD	AAUKD00	384.18-384.28	384.230	AAUKDCY	23
Unl-87	AAELH00	333.07-333.17	333.120	AAELHCY	23	AAELHRV	9.0	No. 2	AAELW00	386.43-386.53	386.480	AAELWCY	18
CBOB 87	AARQW00		327.420	AARQWCY	19	AARQWRV	10.0	ULS heating oil	AAXFJ00	390.68-390.78	390.730	AAXFJCY	18
CBOB 87	AARQX00		327.220	AARQXCY	20	AARQXRV	10.0	ULS heating oil	AAXFK00	386.68-386.78	386.730	AAXFKCY	19
CBOB 87	AARQY00		327.020	AARQYCY	21	AARQYRV	10.0	ULS heating oil	AAXFL00	382.68-382.78	382.730	AAXFLCY	20
CBOB 87	AARQZ00		326.820	AARQZCY	22	AARQZRV	10.0	ULS heating oil	AAXFM00	378.68-378.78	378.730	AAXFMCY	21
CBOB 87	AARQA00		326.620	AARQACY	23	AARQARV	10.0	ULS heating oil	AAXFN00	374.68-374.78	374.730	AAXFNCY	22
								ULS heating oil	AAXFP00	370.68-370.78	370.730	AAXFPCY	23
Distillates													
Jet kero	AAELQ00	392.43-392.53	392.480	AAELQCY	18			Forward pipeline strip					
Jet kero	AAELR00	387.93-388.03	387.980	AAELRCY	19			ULSD 15-30 Day	AUSGI00		385.590		
Jet kero	AAELS00	383.43-383.53	383.480	AAELSCY	20			ULSD 21-35 Day	AUSGJ00		380.050		
Jet kero	AAELT00	378.93-379.03	378.980	AAELTCY	21			ULSD 7-21 Day	AUSGK00		393.550		
Jet kero	AAELU00	374.43-374.53	374.480	AAELUCY	22			Jet Fuel 15-30 Day	AUSGE00		366.250		
Jet kero	AAELV00	369.93-370.03	369.980	AAELVCY	23			Jet Fuel 21-35 Day	AUSGF00		361.710		
ULSD	AAUJV00	404.18-404.28	404.230	AAUJVCY	18			Jet Fuel 7-21 Day	AUSGG00		373.260		

PRODUCT PRICE ASSESSMENTS

WEST COAST PIPELINE, MAR 23 (PGA page 158)

			Mid	Change		RVP			Mid	Change
California										
(¢/gal)		Los Angeles						Differential to NYMEX		
Unl 84	AAUHA00	417.32–417.42	417.370	+10.800	AAUHAV	9.0	AANYX84	73.500	0.000	
Prem unl 90	PGABG00	441.32–441.42	441.370	+11.800	PGABGRV	9.0	AANYX85	97.500	+1.000	
CARBOB	AAKYJ00	417.82–417.92	417.870	+10.800	AAKYJRV	6.0	AANVX00	73.95/74.05	74.000	0.000
CARBOB prem	AAKYL00	441.82–441.92	441.870	+11.800	AAKYL RV	6.0	AANYX86		98.000	+1.000
Jet fuel	PJAAP00	416.43–416.53	416.480	+25.060			AANVY00	4.95/5.05	5.000	0.000
ULS (EPA) diesel	POAET00	408.18–408.28	408.230	+23.650			AANVZ00	26.45/26.55	26.500	+1.500
CARB diesel	POAAK00	406.18–406.28	406.230	+32.650			AANNA00	24.45/24.55	24.500	+10.500
(¢/gal)		San Francisco						Differential to NYMEX		
Unl 84	PGADG00	376.40–376.50	376.450	-2.510	PGADGRV	7.8	AANYX87	34.500	-14.000	
Prem unl 90	PGABO00	400.40–400.50	400.450	-1.510	PGABORV	7.8	AANYX88	58.500	-13.000	
CARBOB unl	AAKYN00	376.90–377.00	376.950	-2.510	AAKYNRV	6.0	AANYX89	35.000	-14.000	
CARBOB prem	AAKYP00	400.90–401.00	400.950	-1.510	AAKYPRV	6.0	AANYX90	59.000	-13.000	
Jet Fuel	PJABC00	416.43–416.53	416.480	+25.060			ADINA00	5.000	0.000	
ULS (EPA) diesel	POAEY00	434.18–434.28	434.230	+32.560			ADLAE00	22.750	+7.500	
CARB diesel	POAAL00	433.93–434.03	433.980	+32.560			ADLAF00	22.500	+7.500	
Other West										
(¢/gal)		Phoenix						Differential to NYMEX		
CBG/RBOB unl	AADDP00	417.32–417.42(a)	417.370	+10.800	AADDP RV	8.0	AANYX91	73.500	0.000	
CBG/RBOB prem	PPXDJ00	441.32–441.42(b)	441.370	+11.800	PPXDJRV	8.0	AANYX92	97.500	+1.000	
Northwest										
(¢/gal)		Seattle						Differential to NYMEX		
Unl 84	AAJJE00	339.32–339.42	339.370	+10.800	AAJJERV	13.5	AANYX93	-4.500	0.000	
Prem unl 90	AAJF00	368.32–368.42	368.370	+10.800	AAJJFRV	13.5	AANYX94	24.500	0.000	
Jet fuel	PJABB00	416.43–416.53	416.480	+25.060			ADIOA00	5.000	0.000	
ULS (EPA) diesel	AAUEX00	434.28–434.38	434.330	+25.060			ADLAH00	-1.150	0.000	
(¢/gal)		Portland						Differential to NYMEX		
Unl 84	AAJJC00	341.57–341.67	341.620	+10.800	AAJJCRV	9.0	AANYX95	-2.250	0.000	
Prem unl 90	AAJJD00	370.57–370.67	370.620	+10.800	AAJJDRV	9.0	AANYX96	26.750	0.000	
ULS (EPA) diesel	AAUEY00	435.43–435.53	435.480	+25.060			ADLAG00	24.000	0.000	

(a)=84 octane; (b)=90 octane

WEST COAST WATERBORNE, MAR 23 (PGA page 158)

(¢/gal)			Mid	Change
Unl 87	PGADI00	417.32–417.42	417.370	+10.800
Jet fuel	PJABI00	415.43–415.53	415.480	+25.060

PRODUCT PRICE ASSESSMENTS

LATIN AMERICA, FOB, MAR 23 (PGA page 164)

			\$/barrel	Mid	Change	
Argentina						
ULSD CIF	AAXWZ00			170.410	+10.320	
Colombia						
FO 1.75% S FOB	PPAR000	102.99–103.01		103.000	+4.610	
Diluent Naphtha Ex-Ship	AAXYB00			116.490	+3.400	
Ecuador						
FO 2.2% S FOB	PPASL00	100.49–100.51		100.500	+4.610	
RON 93 CIF	AAXYC00			139.450	+4.400	
ULSD CIF	AAXWF00			167.760	+9.310	
Peru						
ULSD CIF	AAXWY00			168.260	+9.310	
Mexico cargo						
						Peso/liter Change
Gasoline CIF Eastern Mexico	AAXWA00			136.520	+4.090	AATFH00 17.330 +0.440
Gasoline CIF Rosarito	AATFA00			139.540	+4.180	AATFK00 17.710 +0.450
Gasoline CIF Lazaro Cardenas	AATFD00			139.070	+4.180	AATFN00 17.650 +0.450
ULSD CIF Eastern Mexico	AAXWE00			161.940	+9.620	AATFI00 20.560 +1.140
ULSD CIF Rosarito	AATFB00			160.930	+8.750	AATFL00 20.430 +1.020
ULSD CIF Lazaro Cardenas	AATFE00			160.400	+8.750	AATFO00 20.360 +1.020
Jet CIF Eastern Mexico	AATFG00			159.000	+9.100	AATFJ00 20.180 +1.060
Jet CIF Rosarito	AATFC00			158.560	+8.570	AATFM00 20.130 +1.000
Jet CIF Lazaro Cardenas	AATFF00			158.060	+8.570	AATFP00 20.070 +1.010

TRINIDAD PRODUCT POSTINGS (PGA page 466)

Effective date 21Mar22

		¢/gal
Mogas 92 RON Unleaded	PPRAE00	365.00
Mogas 95 RON Unleaded	PPRAF00	370.00
Dual Purpose Kerosene	PPRAB00	380.00
Gasoil 45 Cetane 0.1%S	PPRAC00	390.00
		\$/b
Bunker C Fuel Oil	PPRAA00	100.00

Source: Paria

GAS LIQUIDS (¢/gal), MAR 23 (PGA page 780)

		Mont Belvieu	Mid	Change
Ethane/propane	PMUDA05	42.450–42.550	42.500	-0.375
Ethane purity	PMUDB05	44.200–44.300	44.250	-0.375
Ethane mo. 2	AAWUC00	42.200–42.300	42.250	0.000
Propane	PMAAY00	147.450–147.550	147.500	+6.000
Propane LST	PMABQ00	147.450–147.550	147.500	+5.250
Propane mo. 2	AAWUD00	147.200–147.300	147.250	+6.250
Propane mo. 2 LST	AAWUE00	146.450–146.550	146.500	+5.250
Normal butane non-LST	PMAAI00	178.200–178.300	178.250	+6.000
Butane LST	PMABR00	172.950–173.050	173.000	+6.000
N-Butane mo. 2	AAWUF00	175.700–175.800	175.750	+6.250
Isobutane	PMAAB00	178.700–178.800	178.750	+3.750
Natural gasoline LST	AAIVF00	269.450–269.550	269.500	+8.000
Natural Targa	PMABW05	269.950–270.050	270.000	+8.000
Natural non-Targa	PMABY05	269.950–270.050	270.000	+8.000
Nat gasoline mo. 2 non-Targa	AAWUG00	259.950–260.050	260.000	+8.000
Conway				
Ethane/propane	PMAA000	36.950–37.050	37.000	-1.000
Propane	PMAAT00	145.700–145.800	145.750	+5.750
Normal butane non-LST	PMAAD00	172.950–173.050	173.000	+4.000
Isobutane	PMAAA00	199.950–200.050	200.000	+0.250
Natural gasoline	PMAAQ00	262.950–263.050	263.000	+6.500
Other hubs				
Hattiesburg propane	AALBC00	147.950–148.050	148.000	+6.000
(\$/mt)				
Waterborne FOB USGC propane	AAXIM00	793.110–793.130	793.120	+30.950
FOB USGC propane vs. Mt Belvieu	AAXIO00	35.160–35.180	35.170	0.000
Waterborne FOB USGC butane	ABTNB00		814.180	+21.790
FOB USGC butane vs. Mt Belvieu	ABTND00		26.050	0.000
VLGC freight rates Houston to NWE	AAXIQ00	51.990–52.010	52.000	0.000
VLGC freight rates Houston to Japan	AAXIS00	100.990–101.010	101.000	0.000
(¢/gal)				
Waterborne FOB USGC propane	AAXIN00	152.220–152.240	152.230	+5.940
FOB USGC propane vs. Mt Belvieu	AAXIP00	6.700–6.800	6.750	0.000
Waterborne FOB USGC butane	ABTNA00		179.730	+4.810
FOB USGC butane vs. Mt Belvieu	ABTNC00		5.750	0.000
VLGC freight rates Houston to NWE	AAXIR00	9.930–10.030	9.980	0.000
VLGC freight rates Houston to Japan	AAXIT00	19.380–19.400	19.390	0.000

PRODUCT PRICE ASSESSMENTS**NEW YORK SUPPLEMENTAL, MAR 23** [\(PGA page 312\)](#)

(¢/gal)	Cargo	Mid	Change	RVP	Barge	Mid	Change	RVP	Cargo ex-Duty	Mid	Change	RVP
Prem CBOB					AAXFT00	339.07-339.17	339.120	+9.050	AAXFTRV			13.5
Prem RBOB					AANWJ00	337.82-337.92	337.870	+9.550	AANWJRV			13.5

U.S. BUCKEYE PIPELINE SUPPLEMENTAL, MAR 23 [\(PGA page 312\)](#)

(¢/gal)			Mid	Change		RVP
RBOB prem	AANWL00	337.82-337.92	337.870	+9.550	AANWLRV	13.5
CBOB prem	AAQIZ00	339.07-339.17	339.120	+9.050	AAQIZRV	13.5
Laurel Pipeline						
CBOB prem	AAVOK00	339.07-339.17	339.120	+9.050	AAVOKRV	13.5

All RVP references are after ethanol

CRUDE PRICE ASSESSMENTS

ASIA PACIFIC/MIDDLE EAST SPOT CRUDE ASSESSMENTS (\$/barrel), MAR 23

Assessment (Asian MOC)					Diffs (Asian MOC)				Diff to Dated Brent (Asian MOC)				Assessment (London MOC)		
			Mid	Change			Mid	Change			Mid	Change		Mid	Change
Condensate		(PGA page 2212)												(PGA page 2213)	
Diff to Dubai															
NW Shelf	PCAGX00	109.68–109.72	109.700	+1.730					AAPAI00	-2.750	0.000		AAPAH00	114.490	+6.310
Ichthys FC	ICFCA00		112.100	+1.730					ICFCB00	-0.350	0.000				
DFC	ADFCB00	113.13–113.17	113.150	+1.200	ADFCB00	8.35/8.45	8.400	0.000	ADFCB00	0.700	-0.530		ADFCB00	117.940	+5.780
Qatar LSC	AARBB00	112.63–112.67	112.650	+1.200	AARBD00	7.85/7.95	7.900	0.000	AARBC00	0.200	-0.530		AARBA00	117.440	+5.780
South Pars	AARAV00	108.33–108.37	108.350	+1.200	AARAX00	3.55/3.65	3.600	0.000	AARAW00	-4.100	-0.530		AARAU00	113.140	+5.780
Diff to ICP															
Senipah	AAEOE00	110.03–110.07	110.050	+1.730	AAEOK00	-1.30/-1.20	-1.250	0.000	AAPBE00	-2.400	0.000		AAPBD00	114.840	+6.310
Light		(PGA page 2214)												(PGA page 2215)	
Diff to ICP															
Cossack	PCAGZ00	112.18–112.22	112.200	+1.230					AAPAC00	-0.250	-0.500		AAPAB00	116.990	+5.810
Gippsland	PCACP00	109.73–109.77	109.750	+1.480					AAPAU00	-2.700	-0.250		AAPAT00	114.540	+6.060
Tapis	PCACB00	120.08–120.12	120.100	+2.030					AAOZW00	7.650	+0.300		AAOZV00	124.890	+6.610
Belida	PCAFI00	109.78–109.82	109.800	+1.480	PCAFM00	0.05/0.15	0.100	-0.150	AAPBQ00	-2.650	-0.250		AAPBP00	114.590	+6.060
Kutubu	PCAFJ00	111.93–111.97	111.950	+1.730					AAPAE00	-0.500	0.000		AAPAD00	116.740	+6.310
Handil Mix	PCABE00	111.23–111.27	111.250	+1.480	PCABF00	0.25/0.35	0.300	-0.150	AAPBI00	-1.200	-0.250		AAPBH00	116.040	+6.060
Attaka	PCAAJ00	109.48–109.52	109.500	+1.480	PCAAK00	-0.95/-0.85	-0.900	-0.150	AAPBC00	-2.950	-0.250		AAPBB00	114.290	+6.060
Ardjuna	PCACQ00	110.38–110.42	110.400	+2.030	PCACR00	0.20/0.30	0.250	+0.150	AAPBG00	-2.050	+0.300		AAPBF00	115.190	+6.610
Banyu Urip	PCAFQ00		120.100	+2.030	PCAQQ00		4.000	+0.150	AAPBU00	7.650	+0.300		AAPBR00	124.890	+6.610
Diff to Dubai															
Sakhalin Blend	AARBN00	85.38–85.42	85.400	+0.700	AARCN00	-19.40/-19.30	-19.350	-0.500	AARDN00	-27.050	-1.030		AAREN00	90.190	+5.280
Sokol	AASCJ00	86.13–86.17	86.150	+0.700	AASCK00	-18.65/-18.55	-18.600	-0.500	AAPAO00	-26.300	-1.030		AAPAN00	90.940	+5.280
Kikeh	AAUWH00	121.08–121.12	121.100	+2.030					AAOZY00	8.650	+0.300		AAOZX00	125.890	+6.610
Miri Light	PCABQ00	120.88–120.92	120.900	+2.030					AAPAS00	8.450	+0.300		AAPAR00	125.690	+6.610
Labuan	PCABL00	122.28–122.32	122.300	+2.480					AAPAQ00	9.850	+0.750		AAPAP00	127.090	+7.060
Kimanis	AASCL00		121.650	+2.030					AASCM00	9.200	+0.300		AASCN00	126.440	+6.610
Medium		(PGA page 2216)												(PGA page 2217)	
Nanhai	PCAFR00	111.83–111.87	111.850	+2.030					AAPAG00	-0.600	+0.300		AAPAF00	116.640	+6.610
Minas*	PCABO00		97.095	+0.685									AAPAZ00	101.885	+5.265
Nile Blend	AAPLC00	114.13–114.17	114.150	+1.780					AAPAM00	1.700	+0.050		AAPAL00	118.940	+6.360
Widuri*	PCAFE00		86.620	+0.265									AAPBN00	91.410	+4.845
Daqing	PCAAZ00	110.23–110.27	110.250	+1.780					AAPAW00	-2.200	+0.050		AAPAV00	115.040	+6.360
Cinta*	PCAAH00		89.875	+0.225									AAPBJ00	94.665	+4.805
Su Tu Den	AARAR00	120.13–120.17	120.150	+1.830					AARAS00	7.700	+0.100		AARAQ00	124.940	+6.410
Bach Ho	PCAHY00	121.18–121.22	121.200	+1.830					AAPAK00	8.750	+0.100		AAPAJ00	125.990	+6.410
Heavy		(PGA page 2218)												(PGA page 2219)	
Diff to ICP															
Dar Blend	AARAB00	116.63–116.67	116.650	+1.780					AARAC00	4.200	+0.050		AARAA00	121.440	+6.360
Shengli	PCABY00	114.93–114.97	114.950	+1.780					AAPAY00	2.500	+0.050		AAPAX00	119.740	+6.360
Duri	PCABA00	118.33–118.37	118.350	+1.780	PCABB00	4.25/4.35	4.300	0.000	AAPBM00	5.900	+0.050		AAPBL00	123.140	+6.360
Vincent	AARAK00		118.250	+1.680					AARAL00	5.800	-0.050		AARAJ00	123.040	+6.260
*Market Parity Price.															
(PGA page 2220)															
(PGA page 2202)															
Diff to Dubai															
Murban M1	AAKNL00	113.03–113.07	113.050	+0.800	AARBZ00		8.300	-0.400							
Murban M2	MBNSA00		110.160	+1.500											
Murban M3	MBNSB00		106.050	+1.400											
Al Shaheen	AAPEV00	111.98–112.02	112.000	+0.600	AAPEW00	7.20/7.30	7.250	-0.600							
Upper Zakum	AAOUQ00	111.73–111.77	111.750	+0.600	DBDUZ00		7.000	-0.600							
Umm Lulu	AUFAO00		113.100	+0.800	DBDUL00		8.350	-0.400							
Das Blend	AAXOF00	112.63–112.67	112.650	+0.800	DBDVS00		7.900	-0.400							
Spread vs OSP															
Qatar Land	AAKNP00	111.98–112.02	112.000	+0.800	AAKUJ00	0.25/0.35	0.300	-0.100							
Qatar Marine	AAKNR00	111.58–111.62	111.600	+0.600	AAKUH00	0.20/0.30	0.250	-0.100							
Banoco Arab Medium	AAKNT00	111.43–111.47	111.450	+0.600	AAKUD00	0.05/0.15	0.100	-0.050							
Assessment (Asian MOC)															
Basrah Medium M1	BSMAM01	–	113.240	+1.350	BSMBM01		0.750	-0.050					PCAQJ00	113.090	+0.810
Basrah Medium M2	BSMAM02	–	110.350	+0.600	BSMBM02		-1.000	-1.550					PCAQB00	112.820	+0.600
Basrah Heavy M1	AALZC00	–	110.390	+1.200	AALZJ00		1.200	-0.200					PCAQC00	112.680	+0.610
Basrah Heavy M2	AALZD00	–	107.550	+0.700	AALZK00		0.800	-0.100					PCAQE00	114.080	+0.810
													BASNA00	111.460	+0.610
													ESPO CFR North Asia	PCAQD00	90.240
													Forties CFR North Asia	PCAQF00	125.180
													Dalia CFR North Asia	PCAQG00	117.270
													WTI MEH CFR North Asia	PCAQH00	118.000

CRUDE PRICE ASSESSMENTS

INTERNATIONAL, MAR 23

(\$/barrel)		Mid	Change
(PGA page 2210)			
Dubai (May)	PCAAAT00	111.74–111.76	111.750 +0.600
Dubai (Jun)	PCAAU00	108.85–108.87	108.860 +1.300
Dubai (Jul)	PCAAV00	104.74–104.76	104.750 +1.200
MEC (May)	AAWSA00	111.74–111.76	111.750 +0.600
MEC (Jun)	AAWSB00	108.85–108.87	108.860 +1.300
MEC (Jul)	AAWSC00	104.74–104.76	104.750 +1.200
Oman (May)	PCABS00	111.99–112.01	112.000 +0.800
Oman (Jun)	AAHZF00	109.10–109.12	109.110 +1.500
Oman (Jul)	AAHZH00	104.99–105.01	105.000 +1.400
Dubai cash/Futures	DBDDC00	7.000	-0.600
Oman cash/Futures	DBDOC00	7.250	-0.400
(PGA page 1212)			
Brent (DTD)	PCAAS00	126.49–126.50	126.495 +6.165
DTD NSL	AAOFD00	126.49–126.50	126.495 +6.165
Dated Brent (CIF)	PCAKM00	127.225	+6.205
Brent (May)	PCAAQ00	121.58–121.60	121.590 +6.640
Brent (Jun)	PCAAAR00	117.63–117.65	117.640 +6.160
Brent (Jul)	PCARR00	113.730	+5.420
North Sea Basket	AAGIZ00	127.00–127.02	127.010 +6.145
(PGA page 218)			
Brent/WTI 1st	AALAU00	7.08/7.10	7.090 +0.490
Brent/WTI 2nd	AALAV00	6.10/6.12	6.110 +0.410
Brent/WTI 3rd	AALAY00	5.510	+0.110
Brent EFP (May)	AAGVX00	0.12/0.14	0.130 -0.110
Brent EFP (Jun)	AAGVY00	0.17/0.19	0.180 -0.120
Brent EFP (Jul)	AAMVY00	0.180	-0.120
Swaps (PGA page 2658)			
Dubai (Apr)	AAHBM00	108.84–108.88	108.860 +1.300
Dubai (May)	AAHBN00	104.73–104.77	104.750 +1.200
Dubai (Jun)	AAHBO00	102.12–102.16	102.140 +1.170
MOG (Apr)	AAHZP00	109.09–109.13	109.110 +1.500
MOG (May)	AAHZR00	104.98–105.02	105.000 +1.400
MOG (Jun)	AAHZT00	102.37–102.41	102.390 +1.370
Oman/Dubai Swap (Apr)	AAIHJ00	0.23/0.27	0.250 +0.200
Oman/Dubai Swap (May)	AAIHL00	0.23/0.27	0.250 +0.200
Oman/Dubai Swap (Jun)	AAIHN00	0.23/0.27	0.250 +0.200

ASIA (\$/barrel), MAR 23 (PGA page 2210)

		Mid	Change
Brent (May)	PCAJG00	116.83–116.87	116.850 +2.100
Brent (Jun)	PCAJI00	113.12–113.16	113.140 +1.980
Brent (Jul)	PCAJO00	109.710	+1.790
Brent (DTD)	AAXPG00	122.230	+1.885
Brent/Dubai	AAJMS00	5.09/5.11	5.100 +1.500
WTI (Apr)	AAFFU00	112.71–112.75	112.730 +1.850
WTI (May)	AAFFW00	110.22–110.26	110.240 +1.370
WTI (Jun)	AAFFY00	107.44–107.48	107.460 +1.310

NORTH SEA, MAR 23 (PGA page 1212)

(\$/barrel)		Mid	Change	Spread vs fwd Dated Brent	Mid	Change
Dated Brent Diff						
BNB	AAVJA00	126.93–126.94	126.935 +6.155	AAXEZ00	4.50/4.52	4.510 -0.040
Forties	PCADJ00	126.88–126.89	126.885 +6.105	AAVJB00	4.94/4.96	4.950 -0.050
Oseberg	PCAEU00	127.26–127.28	127.270 +6.170	AAGWZ00	4.89/4.91	4.900 -0.100
Ekofisk	PCADI00	126.95–126.96	126.955 +6.165	AAGXF00	5.28/5.29	5.285 -0.035
Troll	AAWEX00	127.91–127.93	127.920 +6.170	AAGXB00	4.96/4.98	4.970 -0.040
Statfjord	PCAE00	126.13–126.14	126.135 +6.205	AAWEY00	5.93/5.94	5.935 -0.035
Flotta Gold	PCACZ00	122.38–122.39	122.385 +6.205	AAGXD00	4.14/4.16	4.150 0.000
Duc	AAWEZ00	124.68–124.69	124.685 +6.205	AAGXH00	0.39/0.41	0.400 0.000
Grane Blend	PCALA00	123.635	+6.205	AAWFL00	2.69/2.71	2.700 0.000
Johan Sverdrup	AJSVA00	123.035	+6.205	PCALB00		1.650 0.000
Statfjord (CIF)	AASAS00	127.05–127.06	127.055 +6.235	AJSVB00		1.050 0.000
Gullfaks (CIF)	AASAU00	127.35–127.36	127.355 +6.235	AASAT00	5.24/5.26	5.250 0.000
Alvheim (CIF)	ALVHA00	127.455	+6.235	AASAV00	5.54/5.56	5.550 0.000
Asgard (CIF)	ASGCA00	125.655	+6.235	ALVHB00		5.650 0.000
North Sea Dated Strip	AAKWH00	121.98–121.99	121.985 +6.205	ASGCB00		3.850 0.000
Spread vs fwd CIF Dated Brent						
Dated Brent (CIF)	AAVJG00	127.225	+6.205	AAVJF00	5.420	-0.030
BNB (CIF)	PCAKP00	128.330	+6.215	AAVJC00	6.525	-0.020
Forties (CIF)	PCAKR00	127.820	+6.155	AAHXC00	6.015	-0.080
Oseberg (CIF)	PCAKT00	128.125	+6.215	AAHXD00	6.320	-0.020
Ekofisk (CIF)	PCAKV00	127.685	+6.210	AAHXB00	5.880	-0.025
Troll (CIF)	AAXJO00	128.780	+6.215	AAXJN00	6.975	-0.020
North Sea CIF Dated Strip	AAHXE00	121.805	+6.235			

WEST AFRICA, MAR 23 (PGA pages 1230 and 1232)

(\$/barrel)		Mid	Change	Spread vs fwd DTD Brent	Mid	Change
Nigeria						
Bonny Light	PCAIC00	121.56–121.59	121.575 +6.225	AAGXL00	3.19/3.21	3.200 0.000
Qua Iboe	PCAID00	121.56–121.59	121.575 +6.225	AAGXN00	3.19/3.21	3.200 0.000
Forcados	PCABC00	121.86–121.89	121.875 +6.225	AAGXP00	3.49/3.51	3.500 0.000
Agbami	AAQZB00	120.86–120.89	120.875 +6.225	AAQZC00	2.49/2.51	2.500 0.000
Escravos	AAEIZ00	122.06–122.09	122.075 +6.225	AAGXR00	3.69/3.71	3.700 0.000
Brass River	AAEJB00	121.36–121.39	121.375 +6.225	AAGXV00	2.99/3.01	3.000 0.000
Akpo	PCNGA00	120.86–120.89	120.875 +6.225	PCNGB00	2.49/2.51	2.500 0.000
Bonga	PCNGC00	122.16–122.19	122.175 +6.225	PCNGD00	3.79/3.81	3.800 0.000
Usan	AAXUQ00	121.525	+6.225	AAXUR00		3.150 0.000
Erha	AAXUO00	122.075	+6.225	AAXUP00		3.700 0.000
Egina	AFONA00	122.675	+6.325	AFONB00		4.300 +0.100
Angola						
Cabinda	PCAFD00	121.16–121.19	121.175 +5.875	AAGXT00	2.79/2.81	2.800 -0.350
Nemba	AAQYZ00	119.66–119.69	119.675 +5.875	AAQZA00	1.29/1.31	1.300 -0.350
Dalia	AAQYX00	119.41–119.44	119.425 +5.875	AAQYY00	1.04/1.06	1.050 -0.350
Girassol	AASNL00	121.16–121.19	121.175 +5.875	AASJD00	2.79/2.81	2.800 -0.350
Hungo	AASLJ00	119.16–119.19	119.175 +5.875	AASJF00	0.79/0.81	0.800 -0.350
Kissanje	AASLK00	119.96–119.99	119.975 +5.875	AASJE00	1.59/1.61	1.600 -0.350
Pazflor	PCNGG00	119.51–119.54	119.525 +5.875	PCNGH00	1.14/1.16	1.150 -0.350
Plutonio	PCNGI00	119.21–119.24	119.225 +5.875	PCNGJ00	0.84/0.86	0.850 -0.350
Ghana						
Jubilee	AAXUS00	121.225	+6.225	AAXUT00		2.850 0.000
Republic of Congo						
Djeno	PCNGE00	117.86–117.89	117.875 +6.225	PCNGF00	-0.51/-0.49	-0.500 0.000
Chad						
Doba	AAXUU00	119.375	+6.225	AAXUV00		1.000 0.000
30–60 Day Dtd strip	AAXRK00	118.37–118.38	118.375 +6.225			

CRUDE PRICE ASSESSMENTS

LONDON, MAR 23 (PGA page 1214)

(\$/barrel)		Brent CFD	Mid	Change		Dated Swap	Mid	Change
1wk (Jun)	PCAKA00	8.49/8.51	8.500	+0.120	AAJNV00	126.13/126.15	126.140	+6.280
2wk (Jun)	PCAKC00	6.89/6.91	6.900	-0.070	AAJOS00	124.53/124.55	124.540	+6.090
3wk (Jun)	PCAKE00	5.39/5.41	5.400	+0.010	AAJOU00	123.03/123.05	123.040	+6.170
4wk (Jun)	PCAKG00	4.13/4.15	4.140	+0.340	AAJOW00	121.77/121.79	121.780	+6.500
5wk (Jun)	AAGLU00	3.14/3.16	3.150	+0.400	AAJPC00	120.78/120.80	120.790	+6.560
6wk (Jun)	AAGLV00	2.20/2.22	2.210	+0.300	AAJPE00	119.84/119.86	119.850	+6.460
7wk (Jun)	AALCZ00	1.25/1.27	1.260	+0.170	AALAW00	118.89/118.91	118.900	+6.330
8wk (Jun)	AALDA00	0.34/0.36	0.350	+0.100	AALAX00	117.98/118.00	117.990	+6.260

MEDITERRANEAN, MAR 23 (PGA pages 1220, 1222, 1234)

(\$/barrel)			Mid	Change		Spread vs fwd DTD Brent	Mid	Change
Med Dtd Strip	AALDF00	121.93–121.95	121.940	+6.220				
BTC Dtd Strip	AAUFI00	121.56–121.58	121.570	+6.260				
15–45 Day Dtd Strip	AALGM00	120.56–120.57	120.565	+6.280				
Urals (Rdam)	PCAFW00	90.93–90.97	90.950	+6.220	AAGXJ00	-31.00/-30.98	-30.990	0.000
Urals (Med)	PCACE00	91.23–91.27	91.250	+6.220	AAGXX00	-30.70/-30.68	-30.690	0.000
Urals (Ex-Baltic)	AAGZT00	87.61–87.64	87.625	+6.220	AAHPJ00	-34.32/-34.31	-34.315	0.000
Urals FOB Novo Suez	AAGZS00	88.38–88.41	88.395	+6.400	AAHPH00	-33.55/-33.54	-33.545	+0.180
Urals FOB Novo Afra	AAOTH00	86.13–86.17	86.150	+6.220	AAOTI00	-35.80/-35.78	-35.790	0.000
Urals (Primorsk)	AAVWH00	87.51–87.54	87.525	+6.220	AAWVI00	-34.42/-34.41	-34.415	0.000
Urals (RCMB)	AALIN00	95.79–95.82	95.805	+6.165				
Iranian Light FOB Kharg Island (Med)	AILKA00		118.000	+5.950	AILKB00		-3.940	-0.270
Iranian Heavy FOB Kharg Island (Med)	AIHKA00		115.950	+5.950	AIHKB00		-5.990	-0.270
Es Sider	PCAC000	121.05–121.09	121.070	+6.260	AAGYH00	-0.51/-0.49	-0.500	0.000
Siberian Lt	AAGZW00	96.30–96.34	96.320	+6.220	AAHPK00	-25.63/-25.61	-25.620	0.000
Saharan Bld	AAGZY00	124.45–124.49	124.470	+6.260	AAHPN00	2.89/2.91	2.900	0.000
Azeri Lt	AAGZX00	125.55–125.59	125.570	+6.260	AAHPM00	3.99/4.01	4.000	0.000
Azeri Lt FOB Ceyhan Suez	AAUFM00	124.72–124.76	124.740	+6.405	AAUFN00	3.16/3.18	3.170	+0.145
Azeri Lt FOB Ceyhan Afra	AAUFK00	124.24–124.27	124.255	+6.410	AAUFL00	2.68/2.69	2.685	+0.150
Azeri Lt FOB Supsa	AATHM00	120.81–120.84	120.825	+6.260	AATHN00	-0.75/-0.74	-0.745	0.000
BTC FOB Ceyhan	AAUFH00	124.48–124.51	124.495	+6.405	AAUFJ00	2.92/2.93	2.925	+0.145
Suez Blend	PCACA00	88.20–88.24	88.220	+6.325	AAGYD00	-33.73/-33.71	-33.720	+0.105
Kirkuk	AAEJD00	104.83–104.87	104.850	+6.220	AAGYF00	-17.10/-17.08	-17.090	0.000
CPC Blend CIF	AAGZU00	112.37–112.41	112.390	+6.260	AAHPL00	-9.19/-9.17	-9.180	0.000
CPC Blend FOB Suez	AALVX00	109.84–109.88	109.860	+6.415	AALVZ00	-11.72/-11.70	-11.710	+0.155
CPC Blend FOB Afra	AAOFV00	107.85–107.89	107.870	+6.260	AAOFW00	-13.71/-13.69	-13.700	0.000
(PPE page 1616)								
Urals Med CFD (Apr)	AAMDU00	-30.26/-30.24	-30.250	-0.800	CPC Blend CFD (Apr)	AAOFX00	-4.650	+1.400
Urals Med CFD (May)	AAMEA00	-24.26/-24.24	-24.250	-0.800	CPC Blend CFD (May)	AAOFY00	-1.200	+1.400
Urals Med CFD (Jun)	UMCM003	-12.66/-12.64	-12.650	-0.800	CPC Blend CFD (Jun)	AAOFZ00	-0.950	+1.400
Urals NWE CFD (Apr)	UNCM001	-30.81/-30.79	-30.800	-0.800				
Urals NWE CFD (May)	UNCM002	-24.81/-24.79	-24.800	-0.800				
Urals NWE CFD (Jun)	UNCM003	-13.21/-13.19	-13.200	-0.800				

CANADA, MAR 23 (PGA page 230)

(\$/barrel)			Mid	Change
33–63 Day Dated Strip	AALEJ00	117.97–117.98	117.975	+6.190
Terra Nova	AAJUH00	121.61–121.64	121.625	+6.240
Hibernia	AAJJK00	121.76–121.79	121.775	+6.240
White Rose	AAVJX00	122.51–122.54	122.525	+6.240
		Spread vs fwd DTD Brent	Mid	Change
Terra Nova	AAJUJ00	3.64/3.66	3.650	+0.050
Hibernia	AAJKM00	3.79/3.81	3.800	+0.050
White Rose	AAVJY00	4.54/4.56	4.550	+0.050

PLATTS EURO DENOMINATED CRUDE OIL ASSESSMENTS (€/barrel) (PGA page 1252)

Mar 23			Mid	Change
Dated Brent	AAPYR00	114.96–114.97	114.965	+5.705
Dated Brent (CIF)	PCAKN00		115.628	+5.740
Urals (Mediterranean)	AAPYR00	82.91–82.95	82.930	+5.720
WTI (Apr)	AAPYT00	106.14–106.16	106.150	+6.195
WTI MEH (Apr)	AAVSA00		106.925	+5.699
Mars (Apr)	AAPYU00	103.87–103.89	103.880	+6.195

Euro/US\$ forex rate: 1.100. Platts Euro denominated crude oil assessments are based on market values and a Euro/US\$ forex rate at 4:30 PM local London time.

CRUDE PRICE ASSESSMENTS

UNITED STATES (\$/barrel), MAR 23 (PGA pages 210, 214 & 230)

			Mid	Change
Platts AGS	AGSAA00		119.090	+5.390
WTI (Apr)	PCACG00	117.22-117.24	117.230	+5.470
WTI (May)	PCACH00	114.92-114.94	114.930	+5.660
WTI (Jun)	AAGT00	111.98-112.00	111.990	+5.440
WTI EFP (Apr)	AAGVT00	NA/NA	NA	NA0.000
WTI EFP (May)	AAGVU00	-0.01/0.01	0.000	0.000
WTI EFP (Jun)	AAGVV00	-0.01/0.01	0.000	0.000
Light Houston Sweet	AAXEW00		118.330	+5.170
Light Houston Sweet M2	AAYRV00		116.280	+5.610
LOOP Sour (Apr)	AALSM01		114.730	+5.570
LOOP Sour (May)	AALSM02		112.730	+5.860
LOOP Sour (Jun)	AALSM03		109.290	+5.140
Eagle Ford Marker	AAYA300		116.090	+4.520
Mars (Apr)	AAMBR00	114.82-114.84	114.830	+5.570
Mars (May)	AAMBU00	112.82-112.84	112.830	+5.860
Mars (Jun)	AAMBX00	109.38-109.40	109.390	+5.140
Mars/WTI (Apr)	AAGWH00	-2.41/-2.39	-2.400	+0.100
Mars/WTI (May)	AAKTH00	-2.11/-2.09	-2.100	+0.200
Mars/WTI (Jun)	AAMBO00	-2.61/-2.59	-2.600	-0.300
LOOP/WTI (Apr)	AALOM01		-2.500	+0.100
LOOP/WTI (May)	AALOM02		-2.200	+0.200
LOOP/WTI (Jun)	AALOM03		-2.700	-0.300
LOOP/Mars (Apr)	AALPM01		-0.100	0.000
LOOP/Mars (May)	AALPM02		-0.100	0.000
LOOP/Mars (Jun)	AALPM03		-0.100	0.000
Dated Brent	AAQBF00	126.63-126.65	126.640	+5.270
P-Plus WTI	PCACI00	6.70/6.72	6.710	-0.110
P-5 WTI	AAFE00		111.440	+3.140
WTI-Delta	AAEJK00	3.32/3.34	3.330	-0.110
Kern River	PCABJ00	112.78-112.80	112.790	-0.120

US DOMESTIC CRUDE ASSESSMENTS LONDON CLOSE

(PGA page 1240)		\$/barrel	Mid	Change
WTI (Apr)	AAQAR00	116.79-116.81	116.800	+6.720
WTI (May)	AAQAT00	114.49-114.51	114.500	+6.150
WTI (Jun)	AAQAV00	111.52-111.54	111.530	+5.750
WTI MEH (Apr)	AAYRZ00		117.650	+6.170
WTI MEH (May)	AAXYD00		115.450	+5.800
LLS (Apr)	AAQBB00	118.64-118.66	118.650	+6.320
LLS (May)	AAQBD00	116.64-116.66	116.650	+6.050
Mars (Apr)	AAQAX00	114.29-114.31	114.300	+6.720
Mars (May)	AAQAZ00	112.69-112.71	112.700	+6.350
		Spread	Mid	Change
WTI (Apr)	AAQAS00	NA/NA	NA	NA0.000
WTI (May)	AAQAU00	-0.01/0.01	0.000	0.000
WTI (Jun)	AAQAW00	-0.01/0.01	0.000	0.000
WTI MEH (Apr)	AAyta00		0.850	-0.550
WTI MEH (May)	AAYWA00		0.950	-0.350
LLS (Apr)	AAQBC00	1.84/1.86	1.850	-0.400
LLS (May)	AAQBE00	2.14/2.16	2.150	2.150
Mars (Apr)	AAQAY00	-2.51/-2.49	-2.500	0.000
Mars (May)	AAQBA00	-1.81/-1.79	-1.800	+0.200

			Mid	Change		Spread vs WTI	Mid	Change
WTI Midland	PCACJ00	118.02-118.04	118.030	+5.120	AAGVZ00	0.79/0.81	0.800	-0.350
WTI Midland (2nd month)	AAYZA00		115.930	+5.760	AAXXF00		1.000	+0.100
LLS (1st month)	PCABN00	119.07-119.09	119.080	+5.070	AAGWN00	1.84/1.86	1.850	-0.400
LLS (2nd month)	AAURC00	117.07-117.09	117.080	+5.560	AAURD00	2.14/2.16	2.150	-0.100
HLS (1st month)	PCABD00	118.42-118.44	118.430	+5.070	AAGWP00	1.19/1.21	1.200	-0.400
HLS (2nd month)	AAURE00	116.42-116.44	116.430	+5.560	AAURF00	1.49/1.51	1.500	-0.100
WTS (1st month)	PCACK00	115.77-115.79	115.780	+5.120	AAGWB00	-1.46/-1.44	-1.450	-0.350
WTS (2nd month)	AAURG00	114.62-114.64	114.630	+5.460	AAURH00	-0.31/-0.29	-0.300	-0.200
WTI MEH	AAYRG00		118.330	+5.170	AAYRH00		1.100	-0.300
WTI MEH (2nd month)	AAXXE00		116.280	+5.610	AAYYA00		1.350	-0.050
Poseidon	AABHK00	113.82-113.84	113.830	+5.570	AAGWL00	-3.41/-3.39	-3.400	+0.100
Eugene Island	PCAF00	115.22-115.24	115.230	+5.570	AAGWD00	-2.01/-1.99	-2.000	+0.100
Thunder Horse Blend	AAWZK00	116.12-116.14	116.130	+5.570	AAWZL00	-1.11/-1.09	-1.100	+0.100
Wyoming Sweet	PCACM00	113.87-113.89	113.880	+5.320	AAGWR00	-3.36/-3.34	-3.350	-0.150
Bonito	PCAI00	115.22-115.24	115.230	+5.570	AAGWF00	-2.01/-1.99	-2.000	+0.100
SGC	AAISO00	114.77-114.79	114.780	+5.570	AAISO00	-2.46/-2.44	-2.450	+0.100
ANS (Cal)	PCAAD00	117.00-117.04	117.020	+5.050		Spread vs NYMEX WTI CMA		
WCS ex-Cushing	AAWT00	105.98-106.00	105.990	+5.340	AAGWX00	5.97/5.99	5.980	-0.290
WCS ex-Nederland	AAAY00		107.090	+5.340	AAWTZ00	-5.06/-5.04	-5.050	0.000
Bakken Williston	AAXPP00		114.990	+5.340	AAAYX00		-3.950	0.000
Bakken Guernsey	AASRR00	113.88-113.90	113.890	+5.340	AASRX00		3.950	0.000
Bakken Clearbrook	AASRU00	116.28-116.30	116.290	+5.340	AASRV00	2.84/2.86	2.850	0.000
Bakken USGC Pipe	ABAKA00		116.340	+5.590	AASRW00	5.24/5.26	5.250	0.000
Americas Crude Marker (Apr)	AAQHN00	113.82-113.84	113.830	+5.570	ABAKB00		5.300	+0.250
Americas Crude Marker (May)	AAQHO00	111.82-111.84	111.830	+5.860				
Americas Crude Marker (Jun)	AAQHP00	108.38-108.40	108.390	+5.140				
Thums	PCACD00	114.40-114.42	114.410	-0.120				
Line 63	PCABM00	123.37-123.41	123.390	+5.700				
P-Plus Line 63	PCAFV00	2.39/2.41	2.400	0.000				

ANS (Cal)						Spread vs ICE BRENT CMA		
					AANSA00		3.296	-0.003
Eagle Ford postings avg.	AAyah00		111.830	+2.880		Spread vs Eagle Ford Yield		
		FOB USGC			AAyAI00		-4.260	-1.640
Platts AGS	AGSAA00		119.090	+5.390		FOB USGC Spread vs NYMEX WTI Strip		
Bakken	ABAKC00		118.890	+5.390	AGSAC00		5.840	-0.050
Eagle Ford Crude	AAyat00		118.740	+5.390	ABAKD00		5.640	-0.050
Eagle Ford Condensate	AAyAR00		118.040	+5.390	AAyAU00		5.490	-0.050
WTI	AAyBA00		119.090	+5.390	AAyAS00		4.790	-0.050
		FOB USGC Spread vs Dated Brent Strip			AAyAZ00		5.840	-0.050
Platts AGS	AGSAB00		-1.610	+0.010				
Bakken	ABAKE00		-1.810	+0.010				
Eagle Ford Crude	AEFCA00		-1.960	+0.010				
Eagle Ford Condensate	AEFCB00		-2.660	+0.010				
WTI	AWTUA00		-1.610	+0.010				

US CRUDE ASSESSMENTS SINGAPORE CLOSE

(\$/barrel)		Mid	Change
(PGA page 2208)			
LOOP Sour (Apr)	AAZDA00	110.130	+1.850
LOOP Sour (May)	AAZDB00	107.840	+1.020
LLS (Apr)	AAZDC00	114.980	+1.650
LLS (May)	AAZDD00	112.490	+0.970
Southern Green Canyon	AAZDE00	110.180	+1.850
WTI MEH (Apr)	AAZDF00	114.130	+1.500
WTI MEH (May)	AAZDG00	111.640	+1.220

CRUDE PRICE ASSESSMENTS

CANADIAN SPOT CRUDE ASSESSMENTS, MAR 23

(PGA pages 230 & 232)

		C\$/cu m	Mid	Change
Lloyd Blend	AALRM00	792.978-793.136	793.057	+41.356
Mixed Sweet	AALRT00	887.427-887.585	887.506	+41.249
Light Sour Blend	AALRZ00	863.716-863.874	863.795	+41.276
Midale	AAUCD00	832.101-832.259	832.180	+41.311
Condensates	AALSH00	917.066-917.224	917.145	+41.215
Syncrude Sweet Prem.	AASOL00	928.921-929.079	929.000	+41.201
WCS	AAPP000	789.026-789.184	789.105	+41.360
Cold Lake	AASZY00	787.050-787.208	787.129	+41.362

		\$/barrel	Mid	Change
Lloyd Blend	AALRK00	100.330-100.350	100.340	+5.340
Mixed Sweet	AALRR00	112.280-112.300	112.290	+5.340
Light Sour Blend	AALRX00	109.280-109.300	109.290	+5.340
Midale	AAUCC00	105.280-105.300	105.290	+5.340
Condensates	AALSFO0	116.030-116.050	116.040	+5.340
Syncrude Sweet Prem.	AASOK00	117.530-117.550	117.540	+5.340
WCS	AAPPN00	99.830-99.850	99.840	+5.340
Cold Lake	AASZX00	99.580-99.600	99.590	+5.340

Spread vs Canada Basis

Lloyd Blend	AALRP00	-10.710/-10.690	-10.700	0.000
Mixed Sweet	AALRV00	1.240/1.260	1.250	0.000
Light Sour Blend	AALSD00	-1.760/-1.740	-1.750	0.000
Midale	AAUCE00	-5.760/-5.740	-5.750	0.000
Condensates	AALSJ00	4.990/5.010	5.000	0.000
Syncrude Sweet Prem.	AASOM00	6.490/6.510	6.500	0.000
WCS	AAPPPO0	-11.210/-11.190	-11.200	0.000
Cold Lake	AASZZ00	-11.460/-11.440	-11.450	0.000

*Canada Basis: See explanation at <http://www.platts.com/>

DELIVERED-ASIA SPOT CRUDE ASSESSMENTS (\$/barrel) (PGA page 2238)

		Mid	Change		Diff to Dubai Mid Change		Diff to Asian Dated Brent Mid Change
US Delivered-Asia Spot Crudes							
WTI Midland (DES Singapore)	WTMSA00	113.840	+0.970	WTMSD00	11.700	-0.200	WTMSB00 4.630 -0.640
WTI Midland (DES Yeosu)	WTMYA00	114.340	+0.970	WTMYD00	12.200	-0.200	WTMYB00 5.130 -0.640
Brazil Delivered-Asia Spot Crudes							
Tupi (DES Qingdao)	LUQDA00	114.640	+1.220	LUQDD00	12.500	+0.050	LUQDB00 5.430 -0.390

LATIN AMERICA CRUDE (\$/barrel), MAR 23 (PGA page 280)

		FOB Crude	Mid	Change		Diff to WTI strip		Diff to Futures Brent strip		Diff to Dated Brent strip
Oriente	PCADE00	111.01-111.05	111.030	+5.570	PCAGU00	-1.300	AAXBW00	-3.795	AAXBH00	-7.720
Vasconia	PCAGI00	111.30-111.35	111.325	+5.310	PCAGR00	-1.005	AAXCB00	-3.500	AAXBN00	-7.425
Roncador	AAQTL00	111.75-111.80	111.775	+5.310	AAQTK00	-0.555	AAXBT00	-3.050	AAXAY00	-6.975
Escalante	PCAGC00	116.30-116.35	116.325	+5.110	PCAG000	3.995	AAXB500	1.500	AAXAX00	-2.425
Medanito	AMTOA00		114.225	+5.110	AMTOC00	1.895	AMTOB00	-0.600	AMTOD00	-4.525
Loreto	PCAGH00	110.11-110.15	110.130	+5.570	PCAGQ00	-2.200	AAXBV00	-4.695	AAXBG00	-8.620
Mesa 30	AAITB00	113.00-113.05	113.025	+5.860	AAITH00	0.695	AAXCC00	-1.800	AAXB000	-5.725
Santa Barbara	AAITD00	117.06-117.10	117.080	+5.570	AAITJ00	4.750	AAXBU00	2.255	AAXAZ00	-1.670
Tupi	ATUPA00		119.475	+5.660	ATUPC00	7.145	ATUPB00	4.650	ATUPD00	0.725
Marlim	AAITF00	111.80-111.85	111.825	+5.310	AAITL00	-0.505	AAXBY00	-3.000	AAXBJ00	-6.925
Napo	AAMCA00	105.66-105.70	105.680	+5.570	AAMCD00	-6.650	AAXBX00	-9.145	AAXBI00	-13.070
Castilla Blend	AAVEQ00	109.30-109.35	109.325	+5.310	AAVEQ01	-3.005	AAXBZ00	-5.500	AAXBK00	-9.425
Liza	ALIZA00		119.275	+5.710	ALIZD00	6.945	ALIZC00	4.450	ALIZB00	0.525
Latin America WTI strip	AAXBPO0		112.330	+5.370						
Latin America Futures Brent strip	AAXBQ00		114.825	+5.110						
Latin America Dated Brent strip	AAXBR00		118.750	+5.725						

DAILY OPEC BASKET PRICE (\$/barrel) (PGA page 207)

		Change
22Mar	AAEUQ00	114.600 +0.790

The daily OPEC basket price represents an index of the following 11 grades: Algeria's Saharan Blend, Indonesia's Minas, Iranian Heavy, Iraq's Basra Light, Kuwait's Export, Libya's Es Sider, Nigeria's Bonny Light, Qatar's Marine, Saudi Arabia's Arab Light, Murban of the UAE and Venezuela's BCF 17.

CRUDE OIL POSTINGS

		Effective date		Effective date		Effective date		Effective date
US (\$/barrel) (PGA page 250)								
WTI	PSADF09	Plains 111.41*	23MAR22	PSADI09	Shell 111.50*	23MAR22	PSADG09	Sunoco 111.25*
WTS	PSAED09	110.66	23MAR22	PSAEG09	111.84	23MAR22	PSAEE09	106.25
LLS	PSAMO09	109.91	23MAR22	PSAMQ09	109.91	23MAR22	PSAMP09	109.75
Ok. Swt.	PSUS191	111.41	23MAR22	PSANX09	111.25	23MAR22	PSANW09	111.25
Kansas	PSAPL09	101.76	23MAR22	PSUS112	103.98	23MAR22		
Wyo. Swt	PSAQZ09	108.51	23MAR22					
Eugene Island	AALBB00	106.91	23MAR22					
Eagle Ford						PSUS100	111.25	23MAR22
Eagle Fd Cond						PSUS110	110.25	23MAR22
WTI	PSACP09	Phillips66 111.55*	23MAR22	AAUQN00	FlinthHls 111.50	23MAR22		
WTS	PSADO09	111.65	23MAR22				PSUS066	Coffey 0.00
LLS	PSAMC09	110.30	23MAR22					
Ok. Swt	PSASL09	111.35	23MAR22					
Kansas							PSUS064	111.25
Wyo. Swt.				PSUS264	112.00	23MAR22	PSUS060	105.25
Wyo. Sr.				PSUS261	99.75	23MAR22		

*P-5 WTI is a crude oil postings-based index as of 5:30 p.m. local New York time. Posted prices by the following companies are used in the index: Phillips66, Plains, Sunoco, Shell, and Valero. Postings available at presstime. Companies listed are representative of key crude oil purchasers.

SPOT TANKER RATES, MAR 23

Route							
From	To		Size (mt)	WS		Rate (\$/mt)	
Clean							
(PGT page 1910)							
Med	UKC	PFADCSZ	30k	PFADC10	210.00	TCABA00	24.78
Med	USAC	PFACWSZ	37k	PFACW10	207.50	TCABC00	34.67
Med	Med	PFADBSZ	30k	PFADB10	200.00	TCAAY00	12.52
UKC	UKC	PFALYSZ	22k	PFALY00	266.00	TCABV00	14.39
UKC	USAC	PFAMASZ	37k	PFAMA00	197.50	TCABX00	26.88
UKC	USGC	PFAMBSZ	37k	PFAMB00	192.50	TCACA00	37.29
BSea	Med	PFABXSZ	30k	PFABX00	450.00	TCAAP00	30.65
(PGT page 2920)							
AG	West Coast India	PFABMSZ	35k	PFABM10	255.00	TCAAF00	19.20
AG	Japan	PFABNSZ	35k	PFABN10	200.00	TCAAH00	45.96
Sing	Japan	PFAEBSZ	30k	PFAEB10	255.00	TCABP00	28.71
Sing	HK	PFAKWSZ	30k	PFAKW10	480.00*	TCADI00	16.00
(PGT page 2922)							
AG	Japan	PFAEYSZ	55k	PFAEY10	184.00	TCAAI00	42.28
AG	Japan	PFAMTSZ	75k	PFAMT00	170.00	TCAAJ00	39.07
Dirty							
(PGT page 1962)							
Carib	USGC	PFANZSZ	50k	PFANZ00	200.00	TDABA00	17.88
Carib	USAC	PFALTSZ	70k	PFALT10	187.50	TDAAY00	16.67
(PGT page 1960)							
Med	Med	PFAJPSZ	80k	PFAJP10	135.00	TDABL00	11.65
Med	USGC	PFAJOSZ	80k	PFAJO10	110.00	TDABU00	25.60
UKC	UKC	PFAKDSZ	80k	PFAKD10	125.00	TDACD00	9.34
UKC	USAC	PFAKESZ	80k	PFAKE10	102.50	TDACG00	15.03
(PGT page 1970)							
WAF	USGC	PFAIASZ	130k	PFAIA10	75.00	TDACV00	16.62
UKC	USGC	PFAHNSZ	135k	PFAHN10	95.00	TDACH00	18.62
Med	USGC	PFAHGSZ	135k	PFAHG10	55.00	TDAB500	12.80
(PGT page 2970)							
AG	Asia	PFAJDSZ	80k	PFAJD10	143.00	TDAAC00	27.04
(PGT page 2980)							
AG	Asia	PFAOCSZ	270k	PFAOC00	36.50	TDAAB00	7.88
AG	USGC	PFAOGSZ	280k	PFAOG00	20.00	TDAAN00	8.19

*values are in lumpsum

PLATTS FUTURES ASSESSMENTS SINGAPORE MOC, MAR 23 (PGA page 703)

NYMEX RBOB (¢/gal)

Apr	XNRBA01	334.790
May	XNRBA02	332.250
Jun	XNRBA03	324.500

NYMEX NY ULSD (¢/gal)

Apr	XNHOA01	385.960
May	XNHOA02	360.870
Jun	XNHOA03	340.330

PLATTS FUTURES ASSESSMENTS, MAR 23

NYMEX light sweet crude (\$/barrel) (PGA page 701)

CME 2:30 PM ET settlement		
May	AAWS001	114.930
Jun	AAWS002	111.990
Jul	AAWS003	108.650
Aug	AAWS004	105.260
Platts 2:30 PM ET futures assessment		
May	NYCRM01	114.880
Jun	NYCRM02	111.980
Jul	NYCRM03	108.650
Aug	NYCRM04	105.260
CME 2:30 PM vs Platts 2:30 PM spread		
May	AAWD001	0.050
Jun	AAWD002	0.010
Jul	AAWD003	0.000
Aug	AAWD004	0.000

NYMEX RBOB (¢/gal) (PGA page 701)

CME 2:30 PM ET settlement		
Apr	AARS001	343.870
May	AARS002	341.950
Jun	AARS003	334.690
Platts 2:30 PM ET futures assessment		
Apr	NYRBM01	343.730
May	NYRBM02	341.830
Jun	NYRBM03	334.600
CME 2:30 PM vs Platts 2:30 PM spread		
Apr	AARD001	0.140
May	AARD002	0.120
Jun	AARD003	0.090

NYMEX NY ULSD (¢/gal) (PGA page 701)

CME 2:30 PM ET settlement		
Apr	AAHS001	411.480
May	AAHS002	381.730
Jun	AAHS003	357.220
Platts 2:30 PM ET futures assessment		
Apr	NYHOM01	410.960
May	NYHOM02	381.130
Jun	NYHOM03	356.730
CME 2:30 PM vs Platts 2:30 PM spread		
Apr	AAHD001	0.520
May	AAHD002	0.600
Jun	AAHD003	0.490

ICE Brent crude (\$/barrel) (PGA page 703)

Platts 2:30 PM ET futures assessment		
May	AAQBG00	121.600
Jun	AAQBH00	117.740
Jul	AAZZZ00	113.870
Aug	AAVAL00	110.490

FUTURES SETTLEMENTS, MAR 23

		Settlement	Change	Low	High	Volume*	Open interest	PNT****
NYMEX Light sweet crude (\$/barrel) (PGA page 705)								
May 22	NMCL001	114.93	+3.17	108.38	115.40	268267	294597	
Jun 22	NMCL002	111.99	+2.72	105.69	112.34	108953	184688	
Jul 22	NMCL003	108.65	+2.10	102.76	108.95	57873	105600	
Aug 22	NMCL004	105.26	+1.69	99.89	105.53	35226	58166	
Total	NMCL000					647859		XNCLP00 18713

NYMEX NY ULSD (\$/gal) (PGA page 705)								
Apr 22	NMHO001	4.1148	+0.2506	3.7659	4.1284	16634	31645	
May 22	NMHO002	3.8173	+0.2215	3.5460	3.8304	34807	55929	
Jun 22	NMHO003	3.5722	+0.1926	3.3534	3.5804	21122	35029	
Jul 22	NMHO004	3.4010	+0.1638	3.2267	3.4066	8620	18049	
Total	NMHO000					102008		XNHOP00 4342

NYMEX RBOB unleaded gasoline (\$/gal) (PGA page 705)								
Apr 22	NMRB001	3.4387	+0.1080	3.2994	3.4576	21429	37904	
May 22	NMRB002	3.4195	+0.1149	3.2722	3.4350	49491	99369	
Jun 22	NMRB003	3.3469	+0.1203	3.1954	3.3609	32148	36528	
Jul 22	NMRB004	3.2537	+0.1173	3.1186	3.2667	13702	30752	
Total	NMRB000					137218		XNRBP00 7210

NYMEX Natural Gas (\$/MMBtu) (PGA page 705)								
Apr 22	NMNG001	5.232	+0.05	5.103	5.330	71794	34343	
May 22	NMNG002	5.274	+0.05	5.145	5.364	58715	224362	
Jun 22	NMNG003	5.316	+0.05	5.192	5.400	14714	70881	
Jul 22	NMNG004	5.366	+0.05	5.238	5.450	12786	90963	
Total	NMNG000					235216		XNNGP00 15697

DME Oman crude (\$/barrel)** (PGA pages 702 & 2710)								
May 22 Asia	XDOA001	112.29	+1.06			3273		
May 22	DMOQ001	116.93	+4.77	111.88	116.93	3286	14627	
Jun 22	DMOQ002	115.43	+5.48	115.43	115.43	59	24	
Jul 22	DMOQ003	111.47	+5.35	111.47	111.47	448	19	
Aug 22	DMOQ004	108.55	+4.78	108.55	108.55	389	0	
Total	DMOQ000					4101		XDOQP00 0

IFAD Murban crude (\$/barrel) (PGA page 703)								
May 22	AMIFA00	112.720						
Murban vs Dubai***	AMIFB00	7.970						

ICE Brent (\$/barrel) (PGA page 704)								
May 22	ICLL001	121.60	+6.12	114.45	122.34	248346	187166	
Jun 22	ICLL002	117.75	+5.92	110.78	118.20	299918	418789	
Jul 22	ICLL003	113.86	+5.33	107.48	114.21	134118	219196	
Aug 22	ICLL004	110.49	+4.71	104.82	110.89	73651	109044	
Total	ICLL000					1060169		XILLP00 14845

		Settlement	Change	Low	High	Volume*	Open interest	PNT***
ICE BWAWE (Brent weighted futures average)(\$/barrel) (PGA page 704)								
May 22	XIBW001	115.59						
Jun 22	XIBW002	112.07						

BWAWE data refer to previous day.

ICE WTI (\$/barrel) (PGA page 704)								
May 22	ICIC001	114.93	+5.66	108.48	115.34	35222	64620	
Jun 22	ICIC002	111.99	+5.44	105.79	112.33	41348	78145	
Jul 22	ICIC003	108.65	+5.08	104.30	108.91	23398	27675	
Aug 22	ICIC004	105.26	+4.63	101.51	105.42	13277	20250	
Total	ICIC000					145047		XIICP00 1872

ICE low sulfur Gasoil (\$/mt) (PGA page 704)								
Apr 22	ICLO001	1235.75	+64.50	1155.50	1247.50	31827	73495	
May 22	ICLO002	1138.25	+62.00	1069.50	1148.50	54797	116085	
Jun 22	ICLO003	1054.25	+56.00	995.25	1061.75	42571	67033	
Jul 22	ICLO004	995.00	+44.00	951.00	1004.75	18117	37407	
Total	ICLO000					194773		XILOP00 6498

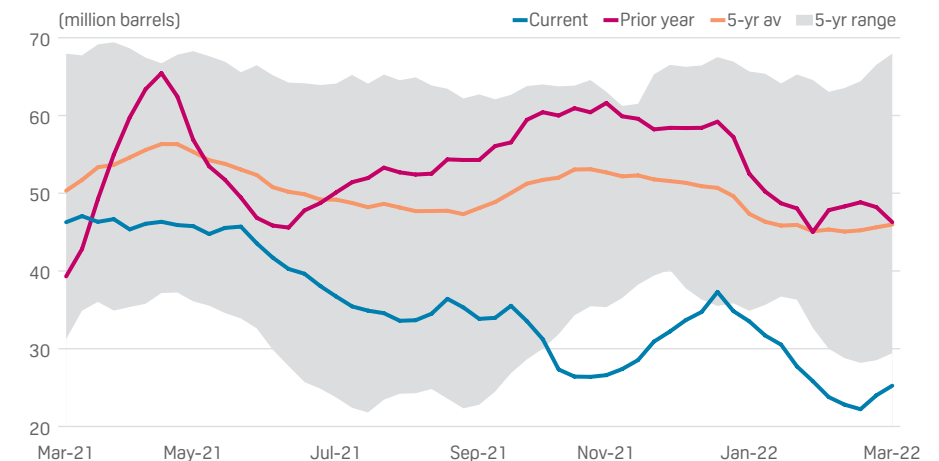
*Volume, open interest and PNT reflect prior trading day. PNT reflect volume for Privately Negotiated Trades or off-exchange.

Oman settlements are Post Close settlements. *IFAD Murban spread to 1st Line (May 22) Platts Dubai crude futures.

****Privately Negotiated Trade values found on PGA page 710

Source: CQG

CUSHING CRUDE STOCKS



Source: US Energy Information Administration

FIVE-DAY ROLLING AVERAGES, FIVE DAYS ENDING MARCH 23

		Conversion		
Naphtha (PGA page 34)				
		\$/barrel		¢/gal
Singapore	PAAAP00	104.40–104.44	(/42)	248.57–248.67
		\$/mt		¢/gal
Japan C/F	PAAAD00	952.30–963.20	(/3.78)	251.93–254.81
Arab Gulf	PAAAA00	902.74–913.64	(/3.78)	238.82–241.70
CIF NWE physical	PAAAL00	962.55–963.05	(/3.78)	254.64–254.78
Rotterdam barge	PAAAM00	958.55–959.05	(/3.78)	253.58–253.72
FOB Med	PAAAI00	930.80–931.30	(/3.78)	246.24–246.38
CIF Genoa	PAAAH00	949.40–949.90	(/3.78)	251.16–251.30
		¢/gal		\$/mt
US Gulf FOB cargo	AAXJP00	257.70 –257.80	(*3.54669)	974.25 –974.35
US Gulf DAP LSR parcel	AAXQK00	258.05	(*4.0083)	1034.34
Jet Kerosene (PGA page 35)				
		\$/mt		¢/gal
CIF NWE cargo	PJAAU00	1199.55–1200.05	(/7.89)	361.99–362.14
Rotterdam barge	PJABA00	1223.25–1223.75	(/7.89)	369.14–369.29
FOB Med	AAIDL00	1173.25–1173.75	(/7.89)	354.05–354.20
CIF Genoa	AAZBN00	1198.05–1198.55	(/7.89)	361.53–361.68
		¢/gal		\$/mt
US Gulf water	PJABM00	355.71–355.81	(*42)	1178.75–1179.08
US Gulf pipe	PJABO00	354.21–354.31	(*42)	1173.77–1174.11
NY barge	PJAAW00	363.51–363.61	(*42)	1199.58–1199.91
LA pipeline	PJAAP00	380.76–380.86	(*42)	1214.62–1214.94
Group 3	PJAAI00	363.76–363.86	(*42)	1205.42–1205.75
Chicago	PJAAF00	358.61–358.71	(*42)	1188.36–1188.69
Crude Oil, FOB Source				
		\$/barrel		
West Texas Int	PCACG00	109.75–109.77		
NYMEX Crude	XNCL001	105.32		
Mars	AAMBR00	107.31–107.33		
Brent (DTD)	PCAA500	118.93–118.94		
Brent (First month)	PCAAQ00	113.21–113.23		
Dubai (First Month)	PCAAT00	108.00–108.02		
Oman (First Month)	PCABS00	108.09–108.11		
Urals CIF med	PCACE00	84.28–84.32		
WTI Posting Plus	PCACI00	6.27 –6.29		
Gasoline, U.S. Market (PGA page 36)				
(¢/gal)		Unleaded		Premium
US Gulf water	PGACU00	327.18–327.28	PGAIX00	343.04–343.14
US Gulf pipe	PGACT00	325.18–325.28	PGAJB00	341.04–341.14
Group 3			PGABD00	339.63–339.73
LA Pipeline			PGABG00	440.58–440.68
SF Pipeline	PGADG00	388.40–388.50	PGABO00	411.60–411.70
Chicago			PPASQ00	346.33–346.43
NYMEX Unl	XNRB001	322.90		

Gasoline, Intl. Market		Conversion		
		Prem (\$/mt)		¢/gal
R'dam Barge Prem unl	PGABM00	1074.35–1074.85	(/3.51)	306.08–306.23
Gasoi/Heating Oil (PGA page 32)				
		\$/barrel		¢/gal
Singapore	POABC00	139.83–139.87	(/.42)	332.93–333.02
Arab Gulf	POAAT00	136.18–136.22	(/.42)	324.25–324.34
		\$/mt		¢/gal
0.1 CIF ARA	AAYWS00	1124.40–1124.90	(/3.133)	359.23–359.39
50 ppm Rotterdam barge	AAUQC00	1185.85–1186.35	(/3.133)	378.87–379.03
0.1 Rotterdam barge	AAYMT00	1106.20–1106.70	(/3.133)	353.42–353.58
0.1 FOB NWE	AAYWR00	1101.90–1102.40	(/3.133)	352.04–352.20
0.1 CIF Med	AAVJ300	1117.10–1117.60	(/3.133)	356.90–357.06
(PGA page 33)				
		¢/gal		\$/barrel
L.A. LS diesel	POAET00	374.80–374.90	(*3.07)	1150.64–1150.95
S.F. LS diesel	POAEY00	396.36–396.46	(*3.07)	1216.82–1217.13
		¢/gal		\$/mt
NY barge	POAEG00	342.96–343.06	(*3.15)	1080.32–1080.63
US Gulf water	POAEE00	361.72–361.82	(*3.08)	1114.09–1114.40
US Gulf pipe	POAED00	357.22–357.32	(*3.08)	1100.23–1100.54
NYMEX NY ULSD	XNH0001	357.01	(*3.08)	1124.59
Low Sulfur Resid Fuel Oil (PGA page 38)				
		\$/mt		\$/barrel
CIF ARA 1%	PUAAL00	699.90–700.40	(/6.35)	110.22–110.30
Rot bar 1%	PUAAP00	683.55–684.05	(/6.35)	107.65–107.72
NWE FOB 1%	PUAAM00	684.80–685.30	(/6.35)	107.84–107.92
Med FOB 1%	PUAAK00	698.35–698.85	(/6.35)	109.98–110.06
		\$/barrel		\$/mt
NY Cargo 1% Max	PUAAO00	110.64–110.66	(*6.5)	719.13–719.26
US Gulf 1%	PUAAI00	108.95–108.97	(*6.11)	688.55–688.68
Hi Sulfur Resid Fuel Oil (PGA page 39)				
		\$/mt		\$/barrel
Singapore 180	PUADV00	637.87–637.91	(/6.35)	100.45–100.46
Singapore 380	PPXDK00	611.86–611.90	(/6.35)	96.36–96.36
Arab Gulf 180	PUABE00	617.98–618.02	(/6.35)	97.32–97.33
CIF ARA 3.5%	PUABA00	597.20–597.70	(/6.35)	94.05–94.13
NWE FOB 3.5%	PUABB00	577.50–578.00	(/6.35)	90.94–91.02
Med FOB 3.5%	PUAAZ00	588.05–588.55	(/6.35)	92.61–92.69
CIF Med 3.5%	PUAAY00	599.55–600.05	(/6.35)	94.42–94.50
		\$/barrel		\$/mt
USAC HSFO	PUAAX00	100.18–100.20	(*6.35)	636.12–636.24
USGC HSFO	PUAFZ00	94.54–94.56	(*6.35)	600.32–600.44

US WHOLESALE POSTED PRICES EFFECTIVE MAR 23

PADD 1	Unleaded	Midgrade	Premium	Kerosene	Diesel No.2	ULSD
Albany, NY	DR198ZY 311.55-335.50	DM198ZY 319.08-343.70	DP198ZY 333.25-356.70	DK198ZY 428.00-449.80		DU198ZY 414.00-441.15
Allentown	DR235ZY 314.35-332.00	DM235ZY 322.68-341.50	DP235ZY 335.42-355.50		DH235ZY -	DU235ZY 416.00-442.00
Atlanta	DR048ZY 307.00-338.57	DM048ZY 320.07-353.57	DP048ZY 345.40-373.26			DU048ZY 392.35-416.24
Baltimore (a)	DR123ZY 315.66-342.65	DM123ZY 329.23-352.25	DP123ZY 340.00-387.18	DK123ZY 409.27-410.00	DH123ZY -	DU123ZY 392.35-419.10
Binghamton	DR200ZY 315.79-334.55	DM200ZY 322.52-351.21	DP200ZY 330.64-376.20			DU200ZY 418.96-434.81
Boston (a)	DR121ZY 314.41-328.75	DM121ZY 319.18-336.20	DP121ZY 328.41-347.70	DK121ZY 478.50-478.50		DU121ZY 414.91-432.56
Charleston	DR250ZY 318.96-338.18	DM250ZY 334.93-348.66	DP250ZY 358.56-381.35			DU250ZY 402.98-428.30
Charlotte	DR169ZY 309.06-339.32	DM169ZY 314.65-349.32	DP169ZY 327.25-370.13			DU169ZY 390.50-412.82
Fairfax (a)	DR299ZY 316.45-362.81	DM299ZY 324.55-382.81	DP299ZY 340.65-407.81			DU299ZY 394.85-417.03
Greensboro				DK171ZY 434.00-434.00		DU171ZY 388.41-412.73
Miami					DU039ZY 408.09-453.10	
New Haven (a)	DR034ZY 317.25-333.46	DM034ZY 321.95-348.32	DP034ZY 330.60-367.32	DK034ZY 478.20-478.20	DH034ZY -	DU034ZY 420.56-433.15
New York City (a)	DR204ZY 328.21-332.40	DM204ZY 335.74-339.70	DP204ZY 349.21-349.80			DU204ZY 413.08-461.16
Newark (a)	DR189ZY 304.45-332.10	DM189ZY 311.12-341.37	DP189ZY 324.45-358.03	DK189ZY 493.02-493.02		DU189ZY 406.58-432.83
Norfolk (a)	DR300ZY 317.76-362.81	DM300ZY 331.13-392.81	DP300ZY 357.80-409.81			DU300ZY 394.25-421.44
Orlando	DR041ZY 324.18-346.05	DM041ZY 339.00-354.55	DP041ZY 351.99-378.60			DU041ZY 406.13-423.65
Philadelphia (a)	DR242ZY 306.79-330.00	DM242ZY 318.00-336.90	DP242ZY 328.00-360.22		DH242ZY -	DU242ZY 404.75-430.06
Pittsburgh	DR243ZY 307.50-339.95	DM243ZY 322.50-365.38	DP243ZY 336.50-365.28	DK243ZY -	DH243ZY -	DU243ZY 398.30-473.00
Providence (a)	DR248ZY 315.37-335.00	DM248ZY 332.44-347.02	DP248ZY 328.66-374.52			DU248ZY 429.69-438.06
Portland	DR126ZY 320.12-321.60	DM126ZY 325.38-329.75	DP126ZY 335.59-344.45		DH126ZY -	DU126ZY 420.29-433.12
Raleigh						DU168ZY 414.45-414.45
Richmond	DR301ZY 315.70-362.81	DM301ZY 325.90-377.81	DP301ZY 342.05-407.81	DK301ZY 437.00-437.00		DU301ZY 396.75-415.10
Savannah	DR054ZY 328.97-339.90	DM054ZY 345.97-352.70	DP054ZY 375.97-386.90			DU054ZY 428.55-428.55
Spartanburg	DR252ZY 307.70-328.71	DM252ZY 311.25-338.71	DP252ZY 317.60-369.20			DU252ZY 389.29-413.55
Tampa					DU045ZY 401.89-422.53	
PADD 2						
Aberdeen	DR253ZY 300.35-318.71	DM253ZY 310.43-335.04	DP253ZY 319.62-347.54			DU253ZY 394.29-412.68
Cape Girardeau	DR144ZY 316.18-327.14		DP144ZY 341.45-348.60			DU144ZY 411.67-427.24
Chattanooga	DR260ZY 313.25-341.95	DM260ZY 325.98-369.48	DP260ZY 335.40-399.68			DU260ZY 388.36-424.60
Chicago (a)	DR075ZY 322.20-347.54	DM075ZY 340.53-351.40	DP075ZY 374.53-387.40	DK075ZY 415.01-481.20		DU075ZY 371.20-395.00
Cleveland	DR212ZY 318.35-329.21	DM212ZY 340.02-356.47	DP212ZY 383.35-397.37	DK212ZY 479.65-479.65		DU212ZY 401.25-429.14
Columbus	DR213ZY 307.06-347.54	DM213ZY 335.12-372.54	DP213ZY 386.45-416.17	DK213ZY 477.15-477.15		DU213ZY 375.15-399.02
Duluth	DR138ZY 299.71-316.00	DM138ZY 315.60-326.66	DP138ZY 333.18-346.41			DU138ZY 385.90-408.30
Des Moines	DR059ZY 294.07-328.72	DM059ZY 305.11-330.07	DP059ZY 321.52-370.72			DU059ZY 382.74-410.90
Detroit	DR130ZY 306.20-319.12	DM130ZY 323.41-353.20	DP130ZY 348.71-379.78	DK130ZY 474.15-474.15		DU130ZY 365.60-379.94
Fargo	DR174ZY 301.25-320.50	DM174ZY 305.51-334.60	DP174ZY 315.88-344.67			DU174ZY 389.25-414.64
Green Bay	DR313ZY 327.00-327.00	DM313ZY -	DP313ZY 362.00-362.00	DK313ZY -		DU313ZY 384.00-384.00
Indianapolis	DR088ZY 311.95-342.26	DM088ZY 326.95-352.58	DP088ZY 346.63-382.26	DK088ZY 432.98-481.45		DU088ZY 375.55-397.00
Kansas City	DR099ZY 293.05-316.00	DM099ZY 301.92-333.00	DP099ZY 342.35-369.06			DU099ZY 376.89-404.50
Knoxville	DR261ZY 305.74-339.74	DM261ZY 313.35-346.93	DP261ZY 326.25-379.93	DK261ZY -		DU261ZY 392.81-415.05
Milwaukee	DR316ZY 305.35-324.00	DM316ZY 316.03-342.95	DP316ZY 335.85-382.95	DK316ZY 398.35-398.35		DU316ZY 371.30-379.54
Minneapolis/St.Paul	DR141ZY 296.48-323.62	DM141ZY 302.36-332.95	DP141ZY 314.25-343.03	DK141ZY 403.15-403.15		DU141ZY 381.50-412.81
Oklahoma City	DR226ZY 290.76-318.05	DM226ZY 306.23-325.64	DP226ZY 313.49-332.34			DU226ZY 371.82-401.66
Omaha	DR185ZY 295.58-326.43	DM185ZY 310.05-330.75	DP185ZY 316.55-367.43			DU185ZY 387.30-407.94
Sioux Falls	DR256ZY 297.11-327.95	DM256ZY 305.71-327.74	DP256ZY 314.62-337.82			DU256ZY 386.75-407.52
St. Louis (a)	DR154ZY 318.23-349.10	DM154ZY 336.00-336.00	DP154ZY 346.50-397.10			DU154ZY 382.15-397.50
PADD 3						
Albuquerque	DR192ZY 356.50-376.25	DM192ZY 375.50-395.25	DP192ZY 394.50-419.75			DU192ZY 431.00-470.25
Amarillo	DR265ZY 317.01-322.50	DM265ZY 333.01-338.50	DP265ZY 354.01-359.50			DU265ZY 421.25-421.25
Baton Rouge	DR115ZY 306.20-337.80	DM115ZY 321.20-339.42	DP115ZY 351.20-363.92			DU115ZY 382.15-398.04
Birmingham	DR003ZY 306.75-340.37	DM003ZY 318.75-351.66	DP003ZY 342.51-392.43	DK003ZY 437.35-437.35		DU003ZY 386.45-424.00
Corpus Christi	DR275ZY 312.86-316.29	DM275ZY 331.29-332.36	DP275ZY 362.29-363.86			DU275ZY 387.10-398.15
Dallas/Ft.Worth (a)	DR276ZY 315.49-323.10	DM276ZY 328.60-351.74	DP276ZY 339.10-369.32			DU276ZY 393.97-402.60
Houston (a)	DR416ZY 312.55-327.54	DM416ZY 325.88-350.04	DP416ZY 347.55-366.58	DK416ZY 436.90-436.90		DU416ZY 382.75-399.18
Little Rock	DR009ZY 289.06-323.86	DM009ZY 306.06-374.06	DP009ZY 328.85-379.86			DU009ZY 384.94-413.51
New Orleans	DR119ZY 303.37-329.75	DM119ZY 337.87-345.75	DP119ZY 350.65-382.75			DU119ZY 381.28-403.45
San Antonio	DR289ZY 303.86-317.41	DM289ZY 319.10-332.41	DP289ZY 329.60-364.91			DU289ZY 391.80-400.75
PADD 4						
Billings (b)	DR162ZY -		DP162ZY 363.75-367.84			DU162ZY 419.93-430.42
Casper (b)	DR321ZY 331.11-331.16		DP321ZY 366.10-366.55		DU321ZY* 424.15-426.50	
Denver	DR028ZY 313.34-323.84	DM028ZY 330.17-342.29	DP028ZY 348.74-363.33			DU028ZY 402.93-436.00
Salt Lake City	DR298ZY 358.86-371.00	DM298ZY 376.68-386.00	DP298ZY 392.52-406.00			DU298ZY 412.50-422.48
PADD 5						
Anacortes	DR305ZY 330.60-351.39	DM305ZY 360.10-375.89	DP305ZY 367.10-387.39			DU305ZY 418.50-436.50
Las Vegas (e)	DR196ZY 416.22-428.60	DM196ZY 424.14-443.60	DP196ZY 434.04-458.60			DU196ZY 424.00-452.50
Los Angeles (e)	DR022ZY 461.50-461.72	DM022ZY 479.50-480.17	DP022ZY 495.15-528.85			DU022ZY 433.95-460.05
Phoenix	DR012ZY 399.76-404.00	DM012ZY 416.76-422.00	DP012ZY 427.50-442.00			DU012ZY 393.61-425.90
Portland	DR233ZY 332.75-348.00	DM233ZY 355.75-362.90	DP233ZY 369.75-383.00			DU233ZY 421.25-453.00
SanFranEBay (e)	DR025ZY 397.93-424.88	DM025ZY 412.93-448.40	DP025ZY 431.45-463.40			DU025ZY 448.39-473.00
Seattle/Tacoma	DR308ZY 321.15-327.20	DM308ZY 348.45-351.80	DP308ZY 356.82-362.55			DU308ZY 423.00-442.85
Spokane	DR309ZY 326.65-335.80	DM309ZY 349.67-351.55	DP309ZY 365.31-368.30			DU309ZY 427.51-437.00

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US WHOLESALE POSTED PRICES EFFECTIVE MAR 19

PADD 1	Unleaded	Midgrade	Premium	Kerosene	Diesel No.2	ULSD
Albany, NY	DR198ZY 304.15-317.00	DM198ZY 311.48-323.20	DP198ZY 326.15-343.20	DK198ZY 385.00-436.10		DU198ZY 383.53-400.05
Allentown	DR235ZY 306.75-314.00	DM235ZY 315.08-322.71	DP235ZY 328.10-338.56		DH235ZY -	DU235ZY 381.95-410.78
Atlanta	DR048ZY 300.75-320.03	DM048ZY 313.42-335.03	DP048ZY 338.75-367.78			DU048ZY 371.22-391.25
Baltimore (a)	DR123ZY 308.00-335.33	DM123ZY 312.00-343.25	DP123ZY 318.00-381.82	DK123ZY 368.00-378.45	DH123ZY -	DU123ZY 372.93-396.07
Binghamton	DR200ZY 308.25-327.33	DM200ZY 314.92-343.45	DP200ZY 323.31-367.63			DU200ZY 386.65-401.17
Boston (a)	DR121ZY 300.55-306.15	DM121ZY 305.25-315.95	DP121ZY 314.20-325.95	DK121ZY 438.85-438.85		DU121ZY 385.15-390.91
Charleston	DR250ZY 313.95-322.18	DM250ZY 329.30-344.20	DP250ZY 354.10-364.52			DU250ZY 383.57-394.85
Charlotte	DR169ZY 303.00-320.78	DM169ZY 310.65-335.87	DP169ZY 323.25-364.02			DU169ZY 371.88-382.05
Fairfax (a)	DR299ZY 310.85-344.83	DM299ZY 320.55-364.83	DP299ZY 336.65-389.83			DU299ZY 376.31-388.23
Greensboro				DK171ZY 395.50-395.50		DU171ZY 368.99-384.88
Miami					DU039ZY 390.48-416.45	
New Haven (a)	DR034ZY 300.25-324.30	DM034ZY 304.95-340.30	DP034ZY 313.60-359.30	DK034ZY 438.55-438.55	DH034ZY -	DU034ZY 384.50-392.93
New York City (a)	DR204ZY 306.86-309.85	DM204ZY 313.59-316.70	DP204ZY 325.61-325.70			DU204ZY 385.11-419.51
Newark (a)	DR189ZY 294.33-321.35	DM189ZY 302.95-333.35	DP189ZY 310.75-350.01	DK189ZY 452.43-452.43		DU189ZY 378.35-403.13
Norfolk (a)	DR300ZY 311.76-344.83	DM300ZY 325.60-374.83	DP300ZY 352.45-391.83			DU300ZY 376.05-386.38
Orlando	DR041ZY 308.94-329.95	DM041ZY 328.73-337.08	DP041ZY 348.99-371.20			DU041ZY 385.70-399.00
Philadelphia (a)	DR242ZY 301.25-312.50	DM242ZY 310.75-325.83	DP242ZY 321.00-352.50		DH242ZY -	DU242ZY 381.31-399.15
Pittsburgh	DR243ZY 301.86-321.00	DM243ZY 316.50-357.62	DP243ZY 327.50-361.00	DK243ZY -	DH243ZY -	DU243ZY 382.61-430.75
Providence (a)	DR248ZY 303.95-326.00	DM248ZY 316.95-339.00	DP248ZY 317.37-366.50			DU248ZY 386.50-396.41
Portland	DR126ZY 299.95-306.60	DM126ZY 307.50-311.48	DP126ZY 320.95-322.10		DH126ZY -	DU126ZY 389.47-391.82
Raleigh						DU168ZY 384.05-384.05
Richmond	DR301ZY 309.82-344.83	DM301ZY 321.90-359.83	DP301ZY 338.05-389.83	DK301ZY 411.00-411.00		DU301ZY 376.90-392.00
Savannah	DR054ZY 322.55-324.68	DM054ZY 336.05-341.68	DP054ZY 371.65-371.68			DU054ZY 389.70-389.70
Spartanburg	DR252ZY 301.55-314.74	DM252ZY 309.00-331.74	DP252ZY 315.35-363.09			DU252ZY 369.87-383.00
Tampa					DU045ZY 382.50-391.87	
PADD 2						
Aberdeen	DR253ZY 299.31-309.31	DM253ZY 308.55-321.71	DP253ZY 317.05-329.71			DU253ZY 361.93-371.98
Cape Girardeau	DR144ZY 307.66-315.95		DP144ZY 322.41-339.56			DU144ZY 386.30-397.89
Chattanooga	DR260ZY 306.00-329.79	DM260ZY 319.32-361.77	DP260ZY 324.60-389.40			DU260ZY 368.38-386.58
Chicago (a)	DR075ZY 306.20-329.10	DM075ZY 324.53-334.88	DP075ZY 357.40-370.88	DK075ZY 394.15-461.95		DU075ZY 352.95-356.75
Cleveland	DR212ZY 318.00-330.75	DM212ZY 339.67-352.42	DP212ZY 383.00-395.75	DK212ZY 460.40-460.40		DU212ZY 385.10-407.14
Columbus	DR213ZY 300.60-338.69	DM213ZY 329.77-363.69	DP213ZY 381.10-409.07	DK213ZY 457.90-457.90		DU213ZY 365.67-372.92
Duluth	DR138ZY 297.50-302.96	DM138ZY 308.16-319.90	DP138ZY 327.91-336.01			DU138ZY 367.30-378.01
Des Moines	DR059ZY 293.47-315.99	DM059ZY 298.56-316.45	DP059ZY 311.25-355.67			DU059ZY 356.60-369.99
Detroit	DR130ZY 299.45-321.59	DM130ZY 321.20-340.45	DP130ZY 344.33-379.17	DK130ZY 454.90-454.90		DU130ZY 350.35-365.51
Fargo	DR174ZY 295.30-307.42	DM174ZY 301.80-317.58	DP174ZY 308.30-324.84			DU174ZY 358.67-376.55
Green Bay	DR313ZY 320.00-320.00	DM313ZY -	DP313ZY 355.00-355.00	DK313ZY -		DU313ZY 363.00-363.00
Indianapolis	DR088ZY 303.60-333.41	DM088ZY 317.23-339.02	DP088ZY 335.83-376.62	DK088ZY 398.87-462.20		DU088ZY 365.85-379.43
Kansas City	DR099ZY 290.31-300.00	DM099ZY 301.46-317.00	DP099ZY 340.09-348.00			DU099ZY 354.19-363.10
Knoxville	DR261ZY 300.21-322.58	DM261ZY 309.85-339.58	DP261ZY 322.25-372.58	DK261ZY -		DU261ZY 369.52-384.71
Milwaukee	DR316ZY 301.35-310.00	DM316ZY 312.03-326.70	DP316ZY 331.85-366.70	DK316ZY 394.10-394.10		DU316ZY 351.30-360.68
Minneapolis/St.Paul	DR141ZY 291.45-305.44	DM141ZY 297.95-315.79	DP141ZY 307.70-327.14	DK141ZY 382.75-382.75		DU141ZY 353.70-376.38
Oklahoma City	DR226ZY 289.19-317.96	DM226ZY 300.49-314.34	DP226ZY 308.57-319.65			DU226ZY 349.98-361.48
Omaha	DR185ZY 294.35-311.38	DM185ZY 300.99-318.24	DP185ZY 308.15-352.38			DU185ZY 356.97-374.85
Sioux Falls	DR256ZY 294.50-312.90	DM256ZY 302.00-315.46	DP256ZY 309.50-324.26			DU256ZY 354.74-371.43
St. Louis (a)	DR154ZY 315.50-341.40	DM154ZY 329.00-329.00	DP154ZY 342.00-389.40			DU154ZY 358.50-367.55
PADD 3						
Albuquerque	DR192ZY 350.50-365.25	DM192ZY 369.50-384.25	DP192ZY 388.50-408.75			DU192ZY 414.00-446.45
Amarillo	DR265ZY 314.19-315.25	DM265ZY 330.19-331.25	DP265ZY 352.19-352.25			DU265ZY 404.50-404.50
Baton Rouge	DR115ZY 299.00-319.26	DM115ZY 314.00-333.64	DP115ZY 344.00-358.14			DU115ZY 362.74-377.70
Birmingham	DR003ZY 300.60-334.05	DM003ZY 312.60-345.42	DP003ZY 336.35-385.08	DK003ZY 418.20-418.20		DU003ZY 367.36-384.39
Corpus Christi	DR275ZY 307.29-311.19	DM275ZY 326.19-327.29	DP275ZY 357.19-358.79			DU275ZY 368.34-370.39
Dallas/Ft.Worth (a)	DR276ZY 308.43-313.75	DM276ZY 314.80-346.27	DP276ZY 325.30-363.75			DU276ZY 373.60-384.46
Houston (a)	DR416ZY 306.50-315.08	DM416ZY 319.83-344.17	DP416ZY 341.50-360.08	DK416ZY 413.00-413.00		DU416ZY 363.95-372.79
Little Rock	DR009ZY 284.28-316.51	DM009ZY 301.28-359.01	DP009ZY 322.90-372.51			DU009ZY 361.15-383.27
New Orleans	DR119ZY 297.80-322.40	DM119ZY 330.30-338.40	DP119ZY 344.90-375.40			DU119ZY 362.00-371.75
San Antonio	DR289ZY 297.61-312.31	DM289ZY 304.10-327.31	DP289ZY 314.60-359.81			DU289ZY 371.50-380.96
PADD 4						
Billings (b)	DR162ZY -		DP162ZY 360.07-360.36			DU162ZY 393.30-402.11
Casper (b)	DR321ZY 328.14-328.19		DP321ZY 363.13-363.58		DU321ZY* 407.15-408.62	
Denver	DR028ZY 304.21-315.10	DM028ZY 324.23-334.29	DP028ZY 339.99-355.41			DU028ZY 361.46-402.50
Salt Lake City	DR298ZY 357.67-365.25	DM298ZY 374.72-378.00	DP298ZY 391.30-398.25			DU298ZY 398.00-410.60
PADD 5						
Anacortes	DR305ZY 328.10-347.89	DM305ZY 357.60-372.39	DP305ZY 364.60-383.89			DU305ZY 395.50-408.51
Las Vegas (e)	DR196ZY 420.00-434.60	DM196ZY 430.08-449.60	DP196ZY 439.98-464.60			DU196ZY 396.00-437.00
Los Angeles(e)	DR022ZY 466.69-475.85	DM022ZY 485.14-496.35	DP022ZY 500.12-516.85			DU022ZY 399.40-423.05
Phoenix	DR012ZY 396.00-407.00	DM012ZY 413.00-418.00	DP012ZY 430.00-438.00			DU012ZY 377.50-402.13
Portland	DR233ZY 330.25-348.00	DM233ZY 353.25-358.35	DP233ZY 361.75-383.00			DU233ZY 397.10-411.78
SanFranEBay (e)	DR025ZY 406.01-437.79	DM025ZY 421.01-455.38	DP025ZY 439.54-468.40			DU025ZY 421.89-436.35
Seattle/Tacoma	DR308ZY 317.20-319.65	DM308ZY 341.80-346.95	DP308ZY 352.55-355.32			DU308ZY 402.05-405.35
Spokane	DR309ZY 325.80-338.09	DM309ZY 341.55-349.82	DP309ZY 358.30-370.76			DU309ZY 397.32-423.00

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PLATTS ANALYTICS WEEKLY FEEDER CRUDE: MARCH 14 - MARCH 18, 2022

US Gulf Coast (PGA page 0837)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGGCY04 124.57	AGGFA04 2.27	AGGCN04 122.30	AAQZB04 105.14	AGGCM04 16.95
Arab Berri	BEGCY04 121.55	TDDAC04 1.32	BEGCN04 120.23	AAIGY00 102.44	BEGCM04 17.79
Arab Heavy	AHGCY04 118.92	TDDAJ04 1.39	AHGCN04 117.53	AAIGV00 99.94	AHGCN04 17.59
Arab Light	LIGCY04 118.43	TDDAR04 1.35	LIGCN04 117.08	AAIGP00 101.09	LIGCM04 15.98
Arab Medium	MEGCY04 112.23	TDDAZ04 1.35	MEGCN04 110.88	AAIGS00 100.39	MEGCM04 10.49
Bakken	BKGCY04 123.64	TDDRP04 7.78	BKGCN04 115.85	AAAXPP04 101.65	BKGCN04 14.20
Basrah Medium	BLGCY04 108.93	TDDBS04 1.62	BLGCN04 107.31	BSMAM41 104.24	BLGCM04 10.40
Bonny Light	YLGCY04 126.72	TDDBX04 2.46	YLGCN04 124.26	PCAAO00 105.84	YLGCM04 18.22
Brent	BRGCY04 122.06	TDDCB04 3.20	BRGCN04 118.87	AAVJA04 110.99	BRGCM04 7.67
Cabinda	CBGCY04 126.45	TDDCF04 2.64	CBGCN04 123.81	PCAFD10 106.13	CBGCM04 17.48
Eagle Ford	EAGCY04 124.28			AAEF004 102.31	EAGCM04 21.97
Escalante	ECGCY04 126.77	TDDCV04 4.33	ECGCN04 122.44	AAIIN00 101.07	ECGCM04 20.81
Forties	FTGCY04 121.57	FTGFA04 3.00	FTGCN04 118.57	PCADJ10 111.20	FTGCM04 7.16
Isthmus	ISGCY04 119.69	TDDDJ04 1.36	ISGCN04 118.32	PCADY00 98.89	ISGCM04 19.44
LLS	LLGCY04 125.21	TDDQW04 0.55	LLGCN04 124.66	AAIIQ00 102.77	LLGCM04 21.89
Marlim	MLGCY04 121.07	TDDGK04 3.36	MLGCN04 117.71	AAITF04 96.71	MLGCM04 20.44
Mars	MRCGY04 115.51	TDDQY04 0.55	MRCGN04 114.96	AAIIM00 98.64	MRCGM04 16.31
Maya	MYGCY04 99.15	TDDDP04 1.42	MYGCN04 97.73	PCADB10 95.29	MYGCM04 2.45
Mesa	MSGCY04 118.17	TDDDV04 2.07	MSGCN04 116.11	AAIZY00 97.36	MSGCM04 18.75
Olmecca	OLGCY04 123.54	TDDDY04 1.37	OLGCN04 122.17	AAIJS00 98.89	OLGCM04 23.29
Poseidon	PDGCY04 116.35	PDGFA04 0.00	PDGCN04 116.35	AABHK04 97.78	PDGCM04 18.57
Saharan Blend	SHGCY04 123.75	TDDRD04 2.11	SHGCN04 121.64	PCABU00 107.64	SHGCM04 13.80
Syncrude	SYGCY04 127.72	SYGFA04 8.52	SYGCN04 119.20	ASOK04 103.90	SYGCM04 15.30
Urals	URGCY04 118.12	TDDFM04 3.29	URGCN04 114.83	AAAVH04 70.68	URGCM04 43.95
WTI	WTGCY04 124.43			AAAYR04 102.27	WTGCM04 22.15
WTS	WSGCY04 118.50	TDDRJ04 6.89	WSGCN04 111.61	PCACK10 99.82	WSGCM04 11.79

US Atlantic Coast (PGA page 0813)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGACY04 121.58	AGAF04 2.03	AGACN04 119.56	AAQZB04 105.14	AGACM04 14.22
Arab Light	LIACY04 118.43	TDDAU04 1.35	LIACN04 117.08	AAIGP00 101.09	LIACM04 15.98
Bakken	BKACY04 121.76	TDDRN04 7.20	BKACN04 114.56	AAAXPP04 101.65	BKACM04 12.90
Bonny Light	YLACY04 123.21	TDDBZ04 2.19	YLACN04 121.02	PCAAO00 105.84	YLACM04 14.98
Brent	BRACY04 119.58	TDDCC04 2.53	BRACN04 117.05	AAVJA04 110.99	BRACM04 6.42
Cabinda	CBACY04 123.46	TDDCH04 2.37	CBACN04 121.09	PCAFD10 106.13	CBACM04 14.75
CPC Blend	CPACY04 120.17	CPAFA04 3.35	CPACN04 116.82	AALVX04 93.07	CPACM04 24.12
Forties	FTACY04 120.04	FTAFA04 2.36	FTACN04 117.67	PCADJ10 111.20	FTACM04 6.83
Saharan Blend	SHACY04 121.75	SHAF04 1.74	SHACN04 120.01	PCABU00 107.64	SHACM04 12.16
Urals	URACY04 115.93	URAF04 2.55	URACN04 113.38	AAAVH04 70.68	URACM04 42.50

US Gulf Coast (PGA page 0835)

	Coke Yield	Coke Freight	Coke Netback	Crude Price	Coke Margin
Arab Heavy	AHGOY04 118.92	TDDAJ04 1.39	AHGN04 117.53	AAIGV00 99.94	AHGM04 17.59
Arab Light	LIGOY04 122.13	TDDAR04 1.35	LIGN04 120.78	AAIGP00 101.09	LIGM04 19.68
Arab Medium	MEGOY04 117.95	TDDAZ04 1.35	MEGN04 116.60	AAIGS00 100.39	MEGM04 16.21
Basrah Heavy	BHGOY04 114.40	BHGFA04 1.69	BHGN04 112.71	AALZC04 101.44	BHGM04 17.55
Basrah Medium	BLGOY04 116.73	TDDBS04 1.62	BLGN04 115.10	BSMAM41 104.24	BLGM04 18.20
Cabinda	CBGOY04 121.61	TDDCF04 2.64	CBGN04 118.97	PCAFD10 106.13	CBGM04 12.64
Castilla Blend	CSGOY04 113.72	CSGFA04 2.18	CSGN04 111.53	AAVEQ04 94.21	CSGM04 17.33
LLS	LLGOY04 125.32	TDDQW04 0.55	LLGN04 124.77	AAIIQ00 102.77	LLGM04 21.99
Marlim	MLGOY04 120.27	TDDGK04 3.36	MLGN04 116.91	AAITF04 96.71	MLGM04 19.64
Mars	MARGOY04 120.46	TDDQY04 0.55	MARGN04 119.91	AAIIM00 98.64	MARGM04 21.27
Maya	MYGOY04 114.90	TDDDP04 1.42	MYGN04 113.48	PCADB10 95.29	MYGM04 18.19
Napo	NPGOY04 111.64	NPGFA04 3.69	NPGN04 107.96	AAMCA04 90.89	NPGM04 16.13
Oriente	ORGOY04 118.32	ORGFA04 3.50	ORGON04 114.81	PCADE10 96.28	ORMGM04 17.65
Urals	URGOY04 121.11	TDDFM04 3.29	URGN04 117.81	AAAVH04 70.68	URGM04 46.93
Vasconia	VCGOY04 123.99	VCGFA04 2.12	VCGN04 121.87	PCAGI04 96.21	VCGM04 25.66
WCS ex-Hardisty	WHGOY04 116.40	TDDRS04 8.50	WHGN04 107.90	AAPPN04 84.44	WHGM04 23.46
WCS ex-Nederland	WNGOY04 116.40	WCGFA04 0.00	WNGON04 116.40	AAAY04 92.86	WNGM04 23.54
WTS	WSGOY04 123.05	TDDRJ04 6.89	WSGN04 116.17	PCACK10 99.82	WSGM04 16.34

PLATTS ANALYTICS WEEKLY FEEDER CRUDES (CONTINUED)

US West Coast (PGA page 0847)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
ANS	ANWCY04 148.03			PCAAA10 101.80	ANWCM04 46.23
Bakken	BKWCY04 155.38	TDDRT04 11.74	BKWCN04 143.63	AAAXPP04 101.65	BKWCMM04 41.98

US Midwest (PGA page 0827)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Bakken	BKTCY04 122.76	TDDR004 1.68	BKTCN04 121.07	AASRU04 102.95	BKTCMM04 18.12
Syncrude	SYTCY04 126.12	TDDFP04 8.20	SYTCN04 117.92	AASOK04 103.90	SYTCMM04 14.02
WTI	WTTCY04 121.79	TDDRG04 2.39	WTTCN04 119.40	PCACG10 100.43	WTTCCM04 18.97
WTS	WSTCY04 118.15	TDDR104 3.08	WSTCN04 115.07	PCACK10 99.82	WSTCCM04 15.25

Northwest Europe (PGA page 1812)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGNCY04 120.03	AGNFA04 2.01	AGNCN04 118.02	AAQZB04 105.14	AGNCMM04 12.88
Arab Berri	BENCY04 120.12	BENFA04 1.32	BENCN04 118.80	AAIGZ00 106.08	BENCM04 12.72
Arab Heavy	AHNCY04 108.80	TDDAN04 1.39	AHNCN04 107.41	AAIGW00 101.28	AHNCMM04 6.13
Arab Light	LINCY04 117.67	TDDAV04 1.35	LINCN04 116.32	AAIGQ00 103.78	LINCMM04 12.54
Arab Medium	MENCY04 111.67	TDDBD04 1.37	MENCN04 110.31	AAIGT00 102.98	MENCM04 7.33
Azeri Light	ZLNCY04 123.69	TDDBI04 2.16	ZLNCN04 121.53	AATHM04 103.25	ZLNCMM04 13.96
Basrah Medium	BLNCY04 108.49	TDDBU04 2.03	BLNCN04 106.46	BSMAM41 104.24	BLNCMM04 -0.14
Bonny Light	YLNCY04 124.59	YLNFA04 2.17	YLNCCN04 122.42	PCAAO00 105.84	YLNCCM04 16.58
Brent	BRNCY04 120.50	TDDCD04 2.11	BRNCN04 118.39	AAVJA04 110.99	BRNCMM04 7.40
Cabinda	CBNCY04 121.57	TDDQR04 2.36	CBNCN04 119.21	PCAFD10 106.13	CBNCMM04 13.08
CPC Blend	CPNCY04 120.78	CPNFA04 2.96	CPNCN04 117.83	AALVX04 93.07	CPNCMM04 24.76
Dubai	DBNCY04 115.71	DBNFA04 1.89	DBNCN04 113.81	PCAAAT10 103.89	DBNCMM04 9.87
Eagle Ford	EANCY04 121.54	EANFA04 3.82	EANCCN04 117.72	AAEF004 102.31	EANCCM04 15.05
Ekofisk	EKNCY04 121.58	TDDCT04 1.45	EKNCN04 120.14	PCADH00 111.13	EKNCMM04 9.01
Forties	FTNCY04 119.96	TDDZ04 1.66	FTNCN04 118.30	PCADJ10 111.20	FTNCMM04 7.09
Iran Heavy	BHNCY04 115.51	TDDDG04 1.97	BHNCN04 113.54	AIHKA04 98.39	BHNCMM04 14.50
Johan Sverdrup	JSNCY04 117.26	JSNFA04 1.73	JSNCN04 115.53	AJSVA04 107.24	JSNCMM04 8.29
Kirkuk	KRNCY04 115.92	TDDGH04 2.97	KRNCN04 112.95	AAIIX00 90.10	KRNCMM04 2.64
LLS	LLNCY04 124.21	LLNFA04 4.01	LLNCN04 120.20	AAQBB04 102.94	LLNCMM04 17.07
Maya	MYNCY04 100.54	MYNFA04 4.12	MYNCN04 96.42	AAAYXE04 95.28	MYNCMM04 1.14
Oman	OMNCY04 117.13	OMNFA04 1.87	OMNCN04 115.26	PCABS10 103.99	OMNCMM04 11.22
Saharan Blend	SHNCY04 121.41	TDDGI04 1.93	SHNCN04 119.48	PCABU00 107.64	SHNCMM04 11.83
Urals*	URNCY04 118.10			PCAFW04 76.20	URNCMM04 41.91
WTI MEH	WTNCY04 121.21	WTNFA04 3.87	WTNCN04 117.34	AAAYR04 102.53	WTNCMM04 14.70

*Indicates the crude price is a CIF value

US West Coast (PGA page 0845)

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
ANS	ANWOY04 149.86			PCAAA10 101.80	ANWOM04 48.05
Arab Light	LIWOY04 152.18	TDDAT04 1.35	LIWON04 150.83	AAIGP00 101.09	LIWOM04 49.73
Arab Medium	MEWOY04 145.62	TDDBB04 1.35	MEWON04 144.27	AAIGS00 100.39	MEWOM04 43.87
Basrah Heavy	BHWOY04 145.58	BHWFA04 2.27	BHWON04 143.31	AALZC04 101.44	BHWOM04 48.72
Basrah Medium	BLWOY04 147.71	TDDBW04 2.17	BLWON04 145.54	BSMAM41 104.24	BLWOM04 49.20
Castilla Blend	CSWOY04 152.16	CSWFA04 5.25	CSWON04 146.91	AAVEQ04 94.21	CSWOM04 51.76
Maya	MYWOY04 145.01	MYWFA04 3.04	MYWON04 141.97	AAUPK04 95.49	MYWOM04 46.48
Napo	NPWOY04 143.66	NPWFA04 4.34	NPWON04 139.33	AAMCA04 90.89	NPWOM04 47.50
Oriente	ORWOY04 149.47	TDDCE04 4.11	ORWON04 145.36	PCADE10 96.28	ORWOM04 48.20
Vasconia	VCWOY04 159.31	VCWFA04 5.07	VCWON04 154.24	PCAGI04 96.21	VCWOM04 57.13

US Midwest (PGA page 0825)

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
WCS	WCTOY04 115.77	TDDR104 8.56	WCTON04 107.21	AAPPN04 84.44	WCTOM04 22.77
WTS	WSTOY04 122.18	TDDR104 3.08	WSTON04 119.09	PCACK10 99.82	WSTOM04 19.27

Mediterranean (PGA page 1822)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGMCY04 117.34	AGMFA04 1.96	AGMCN04 115.38	AAQZB04 105.14	AGMCMM04 10.25
Arab Heavy	AHMCY04 106.16	TDDAI04 1.39	AHMCN04 104.77	AAIGW00 101.28	AHMCMM04 2.94
Arab Light	LIMCY04 115.08	TDDAQ04 1.35	LIMCN04 113.73	AAIGQ00 103.78	LIMCMM04 9.30
Arab Medium	MEMCY04 108.61	TDDAY04 1.37	MEMCN04 107.24	AAIGT00 102.98	MEMCMM04 3.91
Azeri Light*	ZLMCY04 120.97			AAEIX00 108.68	ZLMCMM04 12.29
Basrah Medium	BLMCY04 105.87	TDDBR04 1.54	BLMCN04 104.34	BSMAM41 104.24	BLMCMM04 -2.27
Bonny Light	YLMCY04 122.00	YLMFA04 2.12	YLMCN04 119.89	PCAAO00 105.84	YLMCMM04 14.05
Cabinda	CBMCY04 118.73	CBMFA04 2.30	CBMCN04 116.42	PCAFD10 106.13	CBMCMM04 10.29
CPC Blend*	CPMCY04 117.59			AAGZU04 96.03	CPMCMM04 21.56
Eagle Ford	EAMCY04 118.40	TNEIF04 4.14	EAMCN04 114.25	AAEF004 102.31	EAMCMM04 11.58
Forties	FTMCY04 117.46	FTMFA04 2.35	FTMCN04 115.10	PCADJ10 111.20	FTMCMM04 3.90
Iran Heavy	BHMCY04 113.02	TDDDF04 1.47	BHMCN04 111.55	AIHKA04 98.39	BHMCMM04 12.51
Johan Sverdrup	JSMCY04 114.78	JSMFA04 2.48	JSMCN04 112.30	AJSVA04 107.24	JSMCMM04 5.06
Kirkuk	KRMCY04 113.36	TDDFF04 1.72	KRMCN04 111.64	AAIIX00 90.10	KRMCMM04 1.33
LLS	LLMCY04 121.72	LLMFA04 4.35	LLMCN04 117.37	AAQBB04 102.94	LLMCMM04 14.24
Oman	OMMCY04 114.73	OMMFA04 1.37	OMMCN04 113.35	PCABS10 103.99	OMMCMM04 9.32
Saharan Blend	SHMCY04 118.54	TDDFG04 1.50	SHMCN04 117.04	PCABU00 107.64	SHMCMM04 9.40
Urals*	URMCY04 114.85			AAIJU00 76.50	URMCMM04 38.35

PLATTS ANALYTICS WEEKLY FEEDER CRUDES (CONTINUED)

Singapore (PGA page 2812)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGSCY04 113.85	AGSFA04 1.80	AGSCN04 112.05	AAQZB04 105.14	AGSCM04 6.32
Arab Berri	BESCY04 112.98	BESFA04 1.15	BESCN04 111.82	AAIHA00 107.54	BESCM04 4.28
Arab Heavy	AHSCY04 103.84	TDDA004 1.18	AHSCN04 102.66	AAIGX00 105.34	AHSCM04 -2.68
Arab Light	LISCY04 110.96	TDDAW04 1.17	LISCN04 109.79	AAIGR00 106.74	LISCM04 3.05
Arab Medium	MESCY04 105.95	TDDBE04 1.18	MESCN04 104.78	AAIGU00 106.69	MESCM04 -1.91
Basrah Medium	BHSCY04 105.00	BHSFA04 1.25	BHSCN04 103.75	BSMAM41 104.24	BHSCM04 -1.49
Bonny Light	YLSY04 116.94	YLSFA04 1.92	YLSCN04 115.02	PCAA000 105.84	YLSM04 8.59
Cabinda	CBSCY04 116.69	TDDQS04 1.86	CBSCN04 114.83	PCAFD10 106.13	CBSCM04 8.11
Castilla	CSSCY04 100.98	CSSFA04 2.69	CSSCN04 98.29	AAVEQ04 94.21	CSSCM04 3.13
Dalia	DLSCY04 115.97	DLSFA04 1.92	DLSCN04 114.06	AAQYX04 104.58	DLSCM04 8.88
Dubai	DBSCY04 109.73	TDDCQ04 1.12	DBSCN04 108.61	PCAA110 103.89	DBSCM04 4.73
Duri	DRSCY04 118.98	TDDCR04 0.99	DRSCN04 118.00	PCABA10 108.06	DRSCM04 9.94
Eagle Ford	EASCY04 115.06	EASFA04 2.38	EASCN04 112.68	AAEF004 102.31	EASCM04 9.41
ESPO	ESSCY04 114.51	ESSFA04 0.84	ESSCN04 113.67	AARWF04 84.11	ESSCM04 29.56

*Indicates the crude price is a CIF value

Singapore (PGA page 2812)

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Forties	FTSCY04 113.27	TNEFD04 2.41	FTSCN04 110.86	PCADJ10 111.20	FTSCM04 -0.94
Kimanis	KISCY04 120.21	KISFA04 0.92	KISCN04 119.29	AASCL04 110.61	KISCM04 8.68
LLS	LLSCY04 116.04	LLSFA04 2.47	LLSCN04 113.57	AAZDC04 103.33	LLSCM04 9.84
Mars	MRSCY04 108.77	MRSFA04 2.53	MRSCN04 106.23	AAIIM00 98.64	MRSCM04 6.63
Maya	MYSCY04 101.93	MYSFA04 2.66	MYSCN04 99.27	AAYXG04 99.19	MYSCM04 0.08
Minas	MNSCY04 117.44	TDDDX04 0.87	MNSCN04 116.57	PCAB010 90.53	MNSCM04 26.05
Oman	OMSCY04 108.31	TDDEB04 1.08	OMSCN04 107.23	PCABS10 103.99	OMSCM04 3.24
Qua Iboe	QBSCY04 117.31	QBSFA04 1.92	QBSCN04 115.39	PCAI04 105.84	QBSCM04 8.96
Saharan Blend	SHSCY04 113.38	SHSFA04 2.53	SHSCN04 110.85	PCABU00 107.64	SHSCM04 2.02
Tapis	TPSCY04 115.28	TDDE004 0.91	TPSCN04 114.37	AAIIW00 109.06	TPSCM04 5.31
Tupi*	LUSCY04 115.38			LUQDA04 106.67	LUSCM04 8.25
Urals	URSCY04 110.45	URSFA04 2.53	URSCN04 107.92	AAGZS04 73.15	URSCM04 34.18
WTI MEH	WTSCY04 114.76	WTSFA04 2.41	WTSCN04 112.35	AAZDF04 102.94	WTSCM04 9.12

PLATTS ANALYTICS MONTHLY AVERAGE YIELDS & NETBACKS, FEBRUARY 2022

US Gulf Coast

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGGCY03 105.86	AGGFA03 2.08	AGGCN03 103.77	AAQZB03 93.94	AGGCM03 9.37
Arab Berri	BEGCY03 104.31	TDDAC03 1.32	BEGCN03 102.99	AAIS000 93.60	BEGCM03 9.40
Arab Heavy	AHGCY03 101.85	TDDAJ03 1.39	AHGCN03 100.46	AAISL00 91.10	AHGCN03 9.37
Arab Light	LTGCY03 102.24	TDDAR03 1.35	LTGCN03 100.89	AAISF00 92.25	LTGCN03 8.64
Arab Medium	MEGCY03 97.10	TDDAZ03 1.35	MEGCN03 95.75	AAISI00 91.55	MEGCM03 4.20
Bakken	BKGCY03 105.79	TDDRP03 7.78	BKGCN03 98.01	AAXPP03 90.79	BKGCN03 7.22
Basrah Medium	BLGCY03 94.43	TDDBS03 1.35	BLGCN03 93.37	BSMAM31 92.15	BLGCM03 4.35
Bonny Light	YLG CY03 108.32	TDDBX03 2.26	YLG CN03 106.05	PCAI F03 94.70	YLG CM03 10.89
Brent	BRGCY03 105.36	TDDCB03 1.84	BRGCN03 103.52	AAVJA03 98.32	BRGCM03 4.74
Cabinda	CBGCY03 107.28	TDDCF03 2.42	CBGCN03 104.85	PCAFD03 94.87	CBGCM03 9.52
Eagle Ford	EAGCY03 106.61			AAAYAT03 93.23	EAGCM03 13.38
Escalante	ECGCY03 106.48	TDDCV03 3.11	ECGCN03 103.37	PCAGC03 92.21	ECGCM03 10.60
Forties	FTGCY03 104.55	FTGFA03 1.73	FTGCN03 102.80	PCADJ03 98.29	FTGCM03 4.05
Isthmus	ISGCY03 103.49	TDDDJ03 1.29	ISGCN03 102.20	PDAT039 89.47	ISGCM03 12.73
LLS	LLGCY03 107.64	TDDQW03 0.55	LLGCN03 107.09	PCABN03 94.11	LLGCM03 12.99
Marlim	MLGCY03 104.80	TDDGK03 2.42	MLGCN03 102.38	AAITG00 87.64	MLGCM03 14.17
Mars	MRGCY03 99.95	TDDQY03 0.55	MRGCN03 99.40	AAMBS00 90.10	MRGCM03 9.30
Maya	MYGCY03 87.42	TDDDP03 1.34	MYGCN03 86.07	PDATS39 85.97	MYGCM03 0.10
Mesa	MSGCY03 103.02	TDDDV03 1.97	MSGCN03 101.05	AAITC00 88.29	MSGCM03 12.76
Olmecca	OLGCY03 105.76	TDDDY03 1.30	OLGCN03 104.46	PDATT39 89.77	OLGCM03 14.69
Poseidon	PDGCY03 101.00	PDGFA03 0.00	PDGCN03 101.00	AABHL00 89.45	PDGCM03 11.55
Saharan Blend	SHGCY03 105.66	TDDRD03 1.71	SHGCN03 103.93	AAJIB00 96.96	SHGCM03 6.52
Syncrude	SYGCY03 108.99	SYGFA03 8.52	SYGCN03 100.47	AASOK03 90.02	SYGCM03 10.45
Urals	URGCY03 102.22	TDDFM03 1.94	URGCN03 100.27	AAWVH03 88.95	URGCM03 10.90
WTI	WTGCY03 106.51			AAAYRG03 93.25	WTGCM03 13.26
WTS	WSGCY03 102.43	TDDRJ03 6.89	WSGCN03 95.54	PCACK03 91.74	WSGCM03 3.79

US Atlantic Coast

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGACY03 105.51	AGAF A03 1.86	AGACN03 103.64	AAQZB03 93.94	AGACM03 9.25
Arab Light	LIACY03 102.24	TDDAU03 1.35	LIACN03 100.89	AAISF00 92.25	LIACM03 8.64
Bakken	BKACY03 106.63	TDDRN03 7.20	BKACN03 99.43	AAXPP03 90.79	BKACM03 8.64
Bonny Light	YLACY03 106.95	TDDBZ03 2.01	YLACN03 104.92	PCAI F03 94.70	YLACM03 9.76
Brent	BRACY03 104.66	TDDCC03 2.12	BRACN03 102.53	AAVJA03 98.32	BRACM03 4.32
Cabinda	CBACY03 106.58	TDDCH03 2.18	CBACN03 104.39	PCAFD03 94.87	CBACM03 9.07
CPC Blend	CPACY03 105.72	CPAFA03 2.89	CPACN03 102.81	AALVY00 91.73	CPACM03 11.25
Forties	FTACY03 105.61	FTAFA03 1.98	FTACN03 103.62	PCADJ03 98.29	FTACM03 5.44
Saharan Blend	SHACY03 106.50	SHAF A03 1.43	SHACN03 105.06	AAJIB00 96.96	SHACM03 7.65
Urals	URACY03 101.38	URAF A03 1.54	URACN03 99.83	AAWVH03 88.95	URACM03 10.46

US Gulf Coast

	Coke Yield	Coke Freight	Coke Netback	Crude Price	Coke Margin
Arab Heavy	AHGOY03 101.85	TDDAJ03 1.39	AHGN03 100.46	AAISL00 91.10	AHGM03 9.37
Arab Light	LTGOY03 104.48	TDDAR03 1.35	LTGN03 103.13	AAISF00 92.25	LIGM03 10.89
Arab Medium	MEGOY03 101.06	TDDAZ03 1.35	MEGN03 99.71	AAISI00 91.55	MEGM03 8.16
Basrah Heavy	BHGOY03 97.29	BHGFA03 1.40	BHGN03 96.28	AALZC03 89.72	BHGM03 9.06
Basrah Medium	BLGOY03 99.74	TDDBS03 1.35	BLGN03 98.77	BSMAM31 92.15	BLGM03 9.75
Cabinda	CBGOY03 104.22	TDDCF03 2.42	CBGN03 101.78	PCAFD03 94.87	CBGM03 6.46
Castilla Blend	CSGOY03 97.53	CSGFA03 2.08	CSGN03 95.46	AAVEQ03 84.28	CSGM03 11.18
LLS	LLGOY03 107.10	TDDQW03 0.55	LLGN03 106.55	PCABN03 94.11	LLGM03 12.44
Marlim	MLGOY03 102.23	TDDGK03 2.42	MLGN03 99.81	AAITG00 87.64	MLGM03 11.60
Mars	MRGOY03 103.31	TDDQY03 0.55	MRGN03 102.76	AAMBS00 90.10	MRGM03 12.67
Maya	MYGOY03 98.29	TDDDP03 1.34	MYGN03 96.95	PDATS39 85.97	MYGM03 10.97
Napo	NPGOY03 95.98	NPGFA03 3.60	NPGN03 92.38	AAMCC00 81.56	NPGM03 9.89
Oriente	ORGOY03 101.40	ORGFA03 3.42	ORGN03 97.98	PCADE03 86.38	ORGOM03 10.73
Urals	URGOY03 103.86	TDDFM03 1.94	URGN03 101.92	AAWVH03 88.95	URGM03 12.55
Vasconia	VCGOY03 105.81	VCGFA03 2.02	VCGN03 103.78	PCAGI03 87.70	VCGM03 16.08
WCS ex-Hardisty	WHGOY03 99.96	TDDRS03 8.50	WHGN03 91.46	AAAPPN03 75.82	WHGM03 15.64
WCS ex-Nederland	WNGOY03 99.96	WCGFA03 0.00	WNGN03 99.96	AAAYAY03 83.95	WNGOM03 16.01
WTS	WSGOY03 105.22	TDDRJ03 6.89	WSGN03 98.33	PCACK03 91.74	WSGM03 6.59

PLATTS ANALYTICS MONTHLY AVERAGE YIELDS & NETBACKS (CONTINUED)

US Midwest

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Bakken	BKTCY03 101.19	TDDR003 1.68	BKTCN03 99.51	AASRU13 91.76	BKTCM03 7.75
Syncrude	SYTCY03 103.32	TDDFP03 8.20	SYTCN03 95.12	AASOK03 90.02	SYTCM03 5.10
WTI	WTTCY03 101.64	TDDRG03 2.39	WTTCN03 99.25	PCACG03 91.76	WTTCM03 7.49
WTS	WSTCY03 98.67	TDDRI03 3.08	WSTCN03 95.59	PCACK03 91.74	WSTCM03 3.85

US West Coast

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
ANS	ANWCY03 108.81			PCAAD03 91.99	ANWCM03 16.82
Bakken	BKWCY03 112.83	TDDRT03 11.74	BKWCN03 101.08	AAXPP03 90.79	BKWCN03 10.29

Northwest Europe

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGNCY03 104.45	AGNFA03 1.80	AGNCN03 102.65	AAQZB03 93.94	AGNCM03 8.72
Arab Berri	BENCY03 103.43	BENFA03 1.32	BENCN03 102.11	AAISP00 94.00	BENCM03 8.11
Arab Heavy	AHNCY03 93.97	TDDAN03 1.39	AHNCN03 92.59	AAISM00 90.80	AHNCM03 1.78
Arab Light	LINCY03 101.52	TDDAV03 1.35	LINCEN03 100.17	AAISG00 92.30	LINCEN03 7.87
Arab Medium	MENCY03 96.14	TDDBD03 1.37	MENCN03 94.78	AAISJ00 92.10	MENCN03 2.67
Azeri Light	ZLNCY03 106.40	TDDBI03 1.96	ZLNCN03 104.44	AATHM03 96.65	ZLNCN03 6.69
Basrah Medium	BLNCY03 93.36	TDDBU03 1.46	BLNCN03 92.35	BSMAM31 92.15	BLNCN03 -1.95
Bonny Light	YLNCY03 107.14	YLNFA03 1.95	YLNEN03 105.19	PCAI03 94.70	YLNEN03 10.49
Brent	BRNCY03 104.42	TDDCD03 1.82	BRNCN03 102.60	AAVJA03 98.32	BRNCN03 4.28
Cabinda	CBNCY03 105.30	TDDQR03 2.12	CBNCN03 103.18	PCAFD03 94.87	CBNCN03 8.32
CPC Blend	CPNCY03 104.26	CPNFA03 2.61	CPNCN03 101.65	AALVY00 91.73	CPNCN03 9.92
Dubai	DBNCY03 99.95	DBNFA03 1.36	DBNCN03 99.07	PCAAT03 92.34	DBNCN03 6.19
Eagle Ford	EANCY03 105.42	EANFA03 3.57	EANEN03 101.87	AAVAT03 93.23	EANEN03 8.57
Ekofisk	EKNY03 105.15	TDDCT03 1.25	EKNEN03 103.89	PCADI03 99.04	EKNEN03 4.86
Forties	FTNCY03 103.84	TDDZE03 1.43	FTNCN03 102.41	PCADJ03 98.29	FTNCN03 4.12
Iran Heavy	BHNCY03 100.04	TDDDG03 1.41	BHNCN03 99.12	AIHKA03 87.87	BHNCN03 10.15
Johan Sverdrup	JSNCY03 102.53	JSNFA03 1.49	JSNCN03 101.04	AJSVA03 94.28	JSNCN03 6.76
Kirkuk	KRNCY03 99.95	TDDGH03 2.59	KRNCN03 97.36	AAEJG00 92.27	KRNCN03 -0.27
LLS	LLNCY03 106.50	LLNFA03 3.75	LLNCN03 102.77	AAQBB13 94.22	LLNCN03 8.60
Maya	MYNCY03 87.36	MYNFA03 3.85	MYNCN03 83.49	AAVXE03 84.93	MYNCN03 -1.45
Oman	OMNCY03 101.90	OMNFA03 1.35	OMNCN03 101.06	PCABS03 92.74	OMNCN03 7.79
Saharan Blend	SHNCY03 105.08	TDDGI03 1.69	SHNCN03 103.39	AAJIB00 96.96	SHNCN03 6.42
Urals*	URNCY03 101.61			PCAFW03 90.42	URNCN03 11.19
WTI MEH	WTNCY03 104.60	WTNFA03 3.63	WTNCN03 101.00	AAAYR03 93.37	WTNCN03 7.69

*Indicates the crude price is a CIF value

US Midwest

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
WCS	WCTOY03 95.85	TDDRL03 8.56	WCTON03 87.29	AAPPN03 75.82	WCTOM03 11.47
WTS	WSTOY03 100.57	TDDRI03 3.08	WSTON03 97.48	PCACK03 91.74	WSTOM03 5.74

US West Coast

	Coke Yield	Freight	Coke Netback	Crude Price	Coke Margin
ANS	ANWOY03 109.49			PCAAD03 91.99	ANWOM03 17.50
Arab Light	LIWOY03 111.05	TDDAT03 1.35	LIWON03 109.70	AAISF00 92.25	LIWOM03 17.46
Arab Medium	MEWOY03 107.35	TDDBB03 1.35	MEWON03 106.00	AAISI00 91.55	MEWOM03 14.45
Basrah Heavy	BHWOY03 106.86	BHWFA03 2.00	BHWON03 105.16	AALZC03 89.72	BHWOM03 18.50
Basrah Medium	BLWOY03 107.92	TDDBM03 1.92	BLWON03 106.32	BSMAM31 92.15	BLWOM03 17.86
Castilla Blend	CSWOY03 109.68	CSWFA03 5.15	CSWON03 104.53	AAVEQ03 84.28	CSWOM03 19.31
Maya	MYWOY03 106.32	MYWFA03 2.97	MYWON03 103.35	AAUPK03 86.32	MYWOM03 17.03
Napo	NPWOY03 105.97	NPWFA03 4.25	NPWON03 101.72	AAMCC00 81.56	NPWOM03 19.23
Oriente	ORWOY03 108.93	TDDCE03 4.03	ORWON03 104.91	PCADE03 86.38	ORWOM03 17.65
Vasconia	VCWOY03 117.07	VCWFA03 4.98	VCWON03 112.10	PCAGI03 87.70	VCWOM03 23.49

Mediterranean

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGMCY03 102.97	AGMFA03 1.75	AGMCN03 101.22	AAQZB03 93.94	AGMCM03 7.28
Arab Heavy	AHMCY03 92.99	TDDAI03 1.39	AHMCN03 91.60	AAISM00 90.80	AHMCN03 -0.05
Arab Light	LIMCY03 99.97	TDDAQ03 1.35	LIMCN03 98.62	AAISG00 92.30	LIMCN03 5.37
Arab Medium	MEMCY03 94.92	TDDAY03 1.37	MEMCN03 93.56	AAISJ00 92.10	MEMCN03 0.91
Azeri Light*	ZLMCY03 104.70			AAJIA00 98.73	ZLMCN03 5.98
Basrah Medium	BLMCY03 92.16	TDDBR03 1.12	BLMCN03 91.43	BSMAM31 92.15	BLMCN03 -2.87
Bonny Light	YLMCY03 105.27	YLMFA03 1.90	YLMCN03 103.37	PCAI03 94.70	YLMCN03 8.67
Cabinda	CBMCY03 104.05	CBMFA03 2.07	CBMCN03 101.98	PCAFD03 94.87	CBMCN03 7.12
CPC Blend*	CPMCY03 102.59			AAJHY00 92.96	CPMCN03 9.63
Eagle Ford	EAMCY03 103.97	TNEIF03 3.88	EAMCN03 100.11	AAVAT03 93.23	EAMCN03 6.81
Forties	FTMCY03 102.17	FTMFA03 1.98	FTMCN03 100.19	PCADJ03 98.29	FTMCN03 1.90
Iran Heavy	BHMCY03 98.73	TDDDF03 1.08	BHMCN03 98.10	AIHKA03 87.87	BHMCN03 9.13
Johan Sverdrup	JSMCY03 101.19	JSMFA03 2.08	JSMCN03 99.11	AJSVA03 94.28	JSMCN03 4.83
Kirkuk	KRMCY03 98.41	TDDFF03 1.53	KRMCN03 96.88	AAEJG00 92.27	KRMCN03 -0.75
LLS	LLMCY03 104.65	LLMFA03 4.08	LLMCN03 100.59	AAQBB13 94.22	LLMCN03 6.42
Oman	OMMCY03 100.72	OMMFA03 1.01	OMMCN03 100.16	PCABS03 92.74	OMMCN03 6.90
Saharan Blend	SHMCY03 103.35	TDDFG03 1.34	SHMCN03 102.01	AAJIB00 96.96	SHMCN03 5.05
Urals*	URMCY03 100.52			PCACE03 90.72	URMCN03 9.80

PLATTS ANALYTICS MONTHLY AVERAGE YIELDS & NETBACKS (CONTINUED)

Singapore

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Agbami	AGSCY03 102.29	AGSFA03 1.55	AGSCN03 100.73	AAQZB03 93.94	AGSCM03 6.21
Arab Berri	BESCY03 101.44	BESFA03 0.98	BESCN03 100.46	AAISQ00 95.74	BESCM03 4.72
Arab Heavy	AHSCY03 92.72	TDDA003 1.00	AHSCN03 91.73	AAISN00 93.24	AHSCM03 -1.51
Arab Light	LTSCY03 99.48	TDDAW03 0.99	LTSCN03 98.49	AAISH00 94.74	LTSCM03 3.75
Arab Medium	MESCY03 94.88	TDDBE03 0.99	MESCN03 93.89	AAISK00 94.59	MESCM03 -0.70
Basrah Medium	BHSCY03 93.56	BHSFA03 1.05	BHSCN03 92.51	BSMAM31 92.15	BHSCM03 -0.53
Bonny Light	YLSY03 104.97	YLSFA03 1.66	YLSCN03 103.31	PCAI03 94.70	YLSM03 8.03
Cabinda	CBSCY03 104.72	TDDQ503 1.60	CBSCN03 103.11	PCAFD03 94.87	CBSCM03 7.64
Castilla	CSSCY03 88.15	CSSFA03 2.44	CSSCN03 85.78	AAVEQ03 84.28	CSSCM03 0.75
Dalia	DLSCY03 103.83	DLSFA03 1.65	DLSCN03 102.17	AAQYX03 93.98	DLSCM03 7.60
Dubai	DBSCY03 98.06	TDDCQ03 0.95	DBSCN03 97.11	PCAT03 92.34	DBSCM03 4.77
Duri	DRSCY03 106.41	TDDCR03 0.79	DRSCN03 105.63	AAFZE00 98.23	DRSCM03 7.40
Eagle Ford	EASCY03 103.38	EASFA03 2.17	EASCN03 101.29	AAAT03 93.23	EASCM03 7.30
ESPO	ESSCY03 102.61	ESSFA03 0.74	ESSCN03 101.87	AARWF03 94.76	ESSCM03 7.11

*Indicates the crude price is a CIF value

Singapore (PGA page [xxx])

	Crack Yield	Freight	Crack Netback	Crude Price	Crack Margin
Forties	FTSCY03 101.73	TNEFD03 2.17	FTSCN03 99.54	PCADJ03 98.29	FTSCM03 0.50
Kimanis	KISCY03 108.24	KISFA03 0.74	KISCN03 107.50	AASCL03 99.61	KISCM03 7.90
LLS	LLSCY03 104.23	LLSFA03 2.25	LLSCN03 102.07	AAZDC03 94.83	LLSCM03 7.20
Mars	MRSCY03 97.45	MRSFA03 2.31	MRSCN03 95.21	AAMBS00 90.10	MRSCM03 4.30
Maya	MYSCY03 90.60	MYSFA03 2.43	MYSCN03 88.26	AAAYG03 87.23	MYSCM03 1.03
Minas	MNSCY03 105.56	TDDDX03 0.73	MNSCN03 104.83	AAFZH00 91.75	MNSCM03 13.08
Oman	OMSCY03 96.93	TDDDE03 0.92	OMSCN03 96.02	PCABS03 92.74	OMSCM03 3.28
Qua Iboe	QBSY03 105.36	QBSFA03 1.66	QBSCN03 103.69	PCAI03 94.70	QBSM03 8.41
Saharan Blend	SHSCY03 102.13	SHSFA03 2.04	SHSCN03 100.11	AAJIB00 96.96	SHSCM03 1.91
Tapis	TPSCY03 103.50	TDDDE03 0.73	TPSCN03 102.77	AAFZK00 98.24	TPSCM03 4.54
Tupi*	LUSCY03 103.49			LUQDA03 95.33	LUSCM03 8.39
Urals	URSCY03 98.95	URSFA03 2.13	URSCN03 96.84	AAJHV00 89.33	URSCM03 7.20
WTI MEH	WTSCY03 103.08	WTSFA03 2.20	WTSCN03 100.96	AAZDF03 93.93	WTSCM03 6.97

WEEKLY ASPHALT CEMENT ASSESSMENTS, MAR 18 (PGA page 580)

Market		\$/ton	Mid	Change
Arkansas	PPARP00	575.00-585.00	580.000	+0.000
Colorado	PPARU00	550.00-560.00	555.000	+0.000
Montana	PPASM00	550.00-560.00	555.000	+0.000
California	PPARW00	605.00-615.00	610.000	+0.000
Illinois	PPARX00	540.00-550.00	545.000	+0.000
Georgia	PPARQ00	640.00-650.00	645.000	+0.000
Minneapolis/St. Paul	PPARR00	535.00-545.00	540.000	+0.000
Ohio	PPARY00	555.00-565.00	560.000	+0.000
Oklahoma	AAUQ000	570.00-580.00	575.000	+0.000
Kansas	PPARZ00	585.00-595.00	590.000	+0.000
Texas	PPART00	555.00-565.00	560.000	+0.000
Louisiana	PPALA00	565.00-575.00	570.000	+0.000
MidAtlantic	AAWIC00	570.00-580.00	575.000	+10.000
Tampa	AAWID00	575.00-585.00	580.000	+0.000

MONTHLY SPOT LUBE ASSESSMENTS, FEBRUARY 2022 (PGA page 1146)

		\$/mt	Mid	Change
USGC				
150 SN	PLAAB00	1170.00-1190.00	1180.000	+110.000
500 SN	PLAAE00	1630.00-1650.00	1640.000	+150.000
Bright Stock	PLAAH00	2090.00-2110.00	2100.000	+190.000
Europe				
150 SN	PLAAC00	845.00-865.00	855.000	+80.000
500 SN	PLAAF00	1090.00-1110.00	1100.000	+100.000
Bright Stock	PLAAI00	1450.00-1470.00	1460.000	+135.000
Asia				
150 SN	PLAAA00	820.00-840.00	830.000	+75.000
500 SN	PLAAD00	990.00-1010.00	1000.000	+90.000
Bright Stock	PLAAG00	1280.00-1300.00	1290.000	+115.000

US CRUDE PIPELINE AVERAGES 26JAN22 - 25FEB22

(\$/barrel)			Mid	Change		Spread vs WTI	Mid	Change
(PGA pages 212 & 216)								
WTI (Mar)	AAFCV00	90.75-90.77	90.760	+9.820				
WTI (Apr)	AAFCX00	89.33-89.35	89.340	+9.015				
WTI (May)	AAGIU00	87.80-87.82	87.811	+8.195				
Mars (1st mth)	AAMBS02	88.96-88.98	88.971	+9.736	AAGWK02	-1.80/-1.78	-1.789	-0.084
Mars (2nd mth)	AAMBV02	87.14-87.16	87.145	+8.733	AAKTI02	-2.21/-2.19	-2.195	-0.282
Mars (3rd mth)	AAMBY02	85.66-85.670	85.670	+7.914	AAMPB02	-2.15/-2.13	-2.141	-0.281
P-Plus WTI	AAFT00	5.26/5.28	5.265	+1.119				
WTI-Delta	AAEJK03	1.88/1.90	1.885	+1.119				
Kern River	AAFCLO0	88.12-88.14	88.130	+9.228				
THUMS	AAFCR00	89.74-89.76	89.750	+9.225				
Line 63	AAFCM00	93.59-93.63	93.614	+8.949				
P-Plus Line 63	AAFCN00	2.39-2.41	2.400	0.000				
WTI Midland	AAFCY00	91.94-91.96	91.950	+9.880	AAGWA02	1.18/1.20	1.191	+0.061
LLS (1st mth)	AAFCO00	93.06-93.08	93.071	+10.036	AAGWO02	2.30/2.32	2.311	+0.216
LLS (2nd mth)	AAURC03	91.19-91.21	91.197	+9.200	AAURD03	1.85/1.87	1.857	+0.184
HLS (1st mth)	AAFCO00	92.34-92.36	92.353	+10.473	AAGWQ02	1.58/1.60	1.593	+0.653
HLS (2nd mth)	AAURE03	90.47-90.49	90.479	+9.637	AAURF03	1.13/1.15	1.139	+0.621
WTS (1st mth)	AAFCO00	90.75-90.77	90.760	+9.907	AAGWC02	-0.01/0.01	0.000	NANA
WTS (2nd mth)	AAURG03	89.07-89.09	89.081	+8.891	AAURH03	-0.27/-0.25	-0.259	-0.124
Poseidon	AAFCQ00	88.31-88.33	88.323	+9.688	AAGWM02	-2.45/-2.43	-2.436	-0.131
Eugene Island	AAFCJ00	89.36-89.38	89.371	+9.736	AAGWE02	-1.40/-1.38	-1.389	-0.084
Thunder Horse Bld	AAWZK02	91.52-91.54	91.532	+10.592	AAWZL02	0.76/0.78	0.773	+0.773
Wyoming Sweet	PCACL03	89.54-89.56	89.546	+9.281	AAGWS02	-1.22/-1.20	-1.214	-0.539
Bonito	AAFCI00	89.36-89.38	89.371	+9.736	AAGWG02	-1.40/-1.38	-1.389	-0.084
SGC	AASOI02	88.91-88.93	88.921	+10.246	AASOJ02	-1.85/-1.83	-1.839	+0.426
ACM (Mar)*	AAQHN03	88.31-88.33	88.323	+9.730				
ACM (Apr)*	AAQHO03	86.48-86.50	86.488	+8.718				
ACM (May)*	AAQHP03	85.01-85.03	85.018	+7.904				
London close (\$/barrel)(PGA page 1242)								
WTI (Mar)	AAQAR03	90.93-90.95	90.940	+9.134				
WTI (Apr)	AAQAT03	89.50-89.52	89.508	+8.386				
WTI (May)	AAQAV03	87.96-87.98	87.969	+7.609				
LLS (Mar)	AAQBB03	93.22-93.24	93.231	+9.263	AAQBC03	2.28/2.30	2.291	+0.129
LLS (Apr)	AAQBD03	91.36-91.38	91.367	+8.551	AAQBE03	1.85/1.87	1.859	+0.165
MARS (Mar)	AAQAX03	89.19-89.21	89.195	+9.074	AAQAY03	-1.76/-1.74	-1.745	-0.060
MARS (Apr)	AAQAZ03	87.22-87.24	87.229	+8.024	AAQBA03	-2.29/-2.27	-2.280	-0.362

*=Americas Crude Marker assessed at the Americas market close at 2:30pm Eastern Time.

EUROPEAN MONTHLY AVERAGES, FEBRUARY 2022

(\$/mt)			Mid	Change			Mid	Change
(PGA page 1115)								
Cargoes FOB Med basis Italy					Cargoes CIF Med basis Genoa/Lavera			
Prem unl 10 ppm	AAWZA03	899.913-900.413	900.163	+98.163	AAWZB03	913.813-914.313	914.063	+100.775
Naphtha physical*	PAAAI03	829.663-830.163	829.913	+80.850	PAAAH03	848.263-848.763	848.513	+84.338
Jet av. fuel	AAIDM00	845.450-845.950	845.700	+58.737	AAZBN03	870.275-870.775	870.525	+63.200
10ppm ULSD	AAWYY03	818.475-818.975	818.725	+80.325	AAWYZ03	835.613-836.113	835.863	+83.763
Gasoil 0.1%	AAVJI03	803.450-803.950	803.700	+69.012	AAVJJ03	822.075-822.575	822.325	+73.100
1% fuel oil	PUAAK03	597.063-597.563	597.313	+56.275	PUAAJ03	608.313-608.813	608.563	+57.900
3.5% fuel oil	PUAAZ03	492.563-493.063	492.813	+31.113	PUAAY03	503.600-504.100	503.850	+32.687

*Naphtha FOB Med is basis East Med

(PGA page 1111)								
Cargoes FOB NWE					Cargoes CIF NWE basis ARA			
Gasoline 10 ppm					AAXFQ03	928.088-928.588	928.338	+101.613
Naphtha physical					PAAAL03	861.275-861.775	861.525	+86.462
Naphtha swaps					PAAAJ00	833.875-834.375	834.125	+73.263
Jet kerosene	PJAAV03	858.888-859.388	859.138	+61.950	PJAAU03	871.775-872.275	872.025	+63.200
10ppm ULSD	AAVBF03	819.925-820.425	820.175	+79.650	AAVBG03	836.038-836.538	836.288	+81.825
Diesel 10 ppm NWE	AAWZD03	822.038-822.538	822.288	+79.863	AAWZC03	838.888-839.388	839.138	+82.150
Diesel 10 ppm UK					AAVBH03	840.713-841.213	840.963	+81.475
Diesel 10ppm UK cargoes	SAUKDA03		841.438	+82.550				
CIF NWE - original								
(French) spec								
Gasoil 0.1%	AAYWR03	801.925-802.425	802.175	+74.062	AAYWS03	822.463-822.963	822.713	+75.925
1% fuel oil	PUAAM03	590.400-590.900	590.650	+61.437	PUAAL03	600.538-601.038	600.788	+58.900
3.5% fuel oil	PUABB03	486.738-487.238	486.988	+37.525	PUABA03	500.388-500.888	500.638	+34.275
0.5%-0.7% straight run	PKABA03	662.250-663.250	662.750	+65.575				

[\(PGA pages 1113 & 1381\)](#)

Barges FOB Rotterdam								
98 RON unl	AAKOE00	963.588-964.088	963.838	+94.475				
Prem unl	PGABM03	907.263-907.763	907.513	+91.388				
Eurobob	AAQZV03	891.588-892.088	891.838	+94.388				
MTBE*	PHBFZ03	1038.850-1039.350	1039.100	+99.412				
Naphtha physical	PAAAM03	857.275-857.775	857.525	+86.462				
Jet kerosene	PJABA03	864.813-865.313	865.063	+65.638				
Diesel 10 ppm*	AAJUW00	840.175-840.675	840.425	+87.912				
Gasoil 50 ppm	AAUQC03	831.513-832.013	831.763	+84.450				
Gasoil 0.1%*	AAYWT03	816.350-816.850	816.600	+80.212				
1% fuel oil	PUAAP03	589.150-589.650	589.400	+61.437				
3.5% fuel oil	PUABC03	502.300-502.800	502.550	+34.687				
3.5% 500 CST fuel oil	PUAGN03	497.750-498.250	498.000	+34.137				
380 CST	PUAYW03	517.450-518.450	517.950	+38.050				

*FOB Amsterdam-Rotterdam-Antwerp

SAUDI ARABIAN OFFICIAL SELLING PRICES (\$/barrel), MAR 7

Benchmark			APR	Monthly change	MAR	FEB	JAN
US (PGA page 1070)							
Extra Light	ASCI	AAIQZ00	4.80	+ 1.00	3.80	3.50	3.50
Arab Light	ASCI	AAIRA00	3.45	+ 1.00	2.45	2.15	2.15
Arab Medium	ASCI	AAIRB00	2.75	+ 1.00	1.75	1.45	1.45
Arab Heavy	ASCI	AAIRC00	2.30	+ 1.00	1.30	1.00	1.00

Prices FOB Ras Tanura

Northwest Europe([PGA page 1069](#))

Extra Light	ICE Brent	AAIQ000	4.30	+ 2.10	2.20	-0.10	0.00
Arab Light	ICE Brent	AAIQR00	1.60	+ 1.70	-0.10	-1.80	-1.30
Arab Medium	ICE Brent	AAIQS00	0.50	+ 1.40	-0.90	-2.00	-1.70
Arab Heavy	ICE Brent	AAIQT00	-1.40	+ 1.20	-2.60	-3.30	-2.90

Prices FOB Ras Tanura

Mediterranean([PGA page 1069](#))

Extra Light	ICE Brent	AAWQK00	4.00	+ 1.70	2.30	0.50	0.50
Arab Light	ICE Brent	AAWQL00	1.90	NA NA	0.00	-1.40	-1.20
Arab Medium	ICE Brent	AAWQM00	0.80	+ 1.90	-1.10	-2.00	-2.00
Arab Heavy	ICE Brent	AAWQN00	-0.60	+ 2.00	-2.60	-3.00	-3.00

Prices FOB Ras Tanura

FOB Sidi Kerir([PGA page 1069](#))

Extra Light	ICE Brent	AAUCS00	NA	NA NA	2.85	1.05	1.00
Arab Light	ICE Brent	AAUCU00	NA	NA NA	0.55	-0.85	-0.70
Arab Medium	ICE Brent	AAUCW00	NA	NA NA	-0.55	-1.45	-1.50
Arab Heavy	ICE Brent	AAUCY00	NA	NA NA	-2.05	-2.45	-2.50

Asia([PGA page 1068](#))

Super Light	(O+D)/2	AAIQU00	8.15	+ 2.70	5.45	5.15	6.15
Extra Light	(O+D)/2	AAIQV00	5.90	+ 2.30	3.60	3.20	4.50
Arab Light	(O+D)/2	AAIQW00	4.95	+ 2.15	2.80	2.20	3.30
Arab Medium	(O+D)/2	AAIQX00	4.90	+ 2.15	2.75	2.05	3.05
Arab Heavy	(O+D)/2	AAIQY00	3.55	+ 2.15	1.40	0.70	1.80

Prices FOB Ras Tanura

ASCI=Argus Sour Crude Index; BWAVE=ICE Brent Weighted Average; (O+D)/2=Average of Platts Oman and Dubai assessments

Sources: Saudi Aramco OSP differentials prior to July 2017 were set against BWAVE.



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Argus US Products

Issue 22-56 | Wednesday 23 March 2022

OVERVIEW

■ May Nymex light sweet crude futures rose by \$5.66/bl to settle at \$114.93/bl as the US and EU prepare to announce expanded joint sanctions on Russia amid an already tight energy market. Nymex RBOB rose by 10.8¢/USG to \$3.4387/USG and Nymex ULSD rose by 25.06¢/USG to settle at \$4.1148/USG.

■ US fuel stocks fell in the week ending 18 March, amid a steep rise in gasoline exports and a jump in domestic demand for diesel and jet fuel. US gasoline stocks dropped by 1.2pc to 238mn bl on the week, according to the US Energy Information Administration (EIA), and diesel fell by 1.8pc to 112.1mn bl.

■ US Atlantic coast ultra-low sulfur diesel (ULSD) and jet cash prices continued rising and RBOB gasoline cash prices reached a two-week high.

■ US Gulf coast distillates continued to rise and gasoline prices were up in the region by more than 11¢/USG.

■ Consolidation of smaller trading companies is likely after the successive shocks of Covid-19 and the current extreme commodity market volatility, chief financial officers told the FT Global Commodities Summit in Lausanne today.

■ The US has formally accused Russian troops of war crimes in Ukraine, as President Joe Biden heads to Europe on a trip that will include new sanctions and energy policies meant to punish Moscow.

Contents

Gasoline	3
Distillates	7
Biofuels and blending components	12
Feedstocks and residual fuel oil	17
Latest news	21
Announcements	28

MARKET SUMMARY

Price	¢/USG			
	New York	Houston	Chicago	Los Angeles
CBOB/suboctane	323.370	326.870	332.870	423.870
RBOB	323.370	337.870	342.870	417.870
87 conv	331.870	336.495	332.870	
Ethanol	251.000	258.400	248.500	257.300
Jet fuel	411.480	391.980	391.480	416.480
ULSD	428.980	404.230	389.480	405.230
Bunker fuel \$/t	742.500	742.500		751.500

Differential to Nymex	¢/USG			
	New York	Houston	Chicago	Los Angeles
CBOB/suboctane	-20.500	-17.000	-11.000	+80.000
RBOB	-20.500	-6.000	-1.000	+74.000
87 conv	-12.000	-7.375	-11.000	
Jet fuel	0.000	-19.500	-20.000	+5.000
ULSD	+17.500	-7.250	-22.000	+23.500
Bunker fuel \$/t	+2.619	+2.619		+4.044

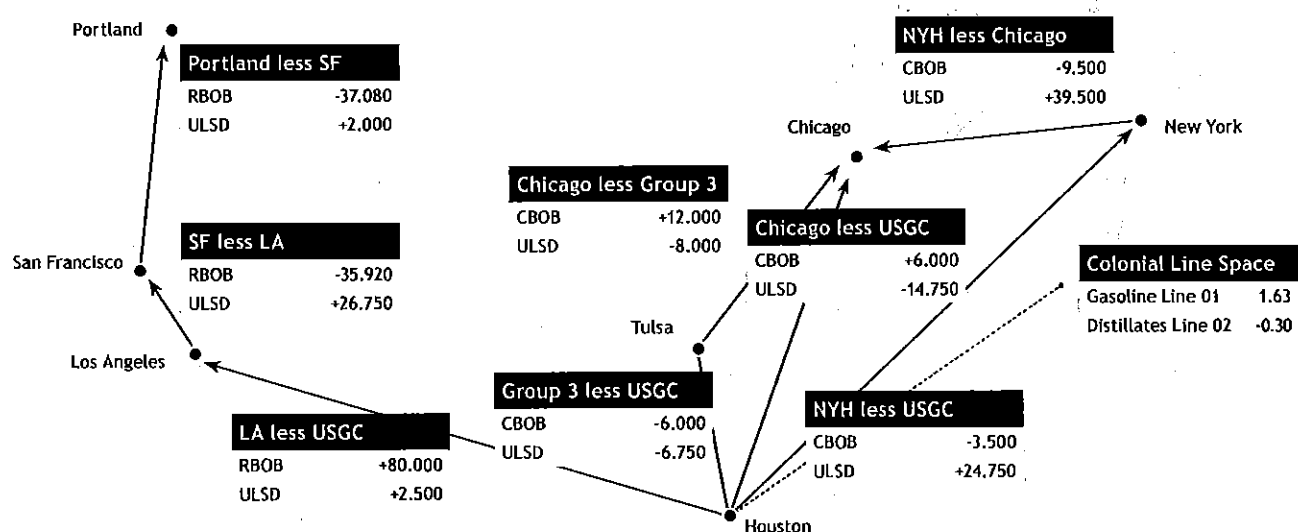
Change on day	¢/USG			
	New York	Houston	Chicago	Los Angeles
CBOB/suboctane	+9.050	+10.675	+9.800	+10.800
RBOB	+9.050	+11.050	+9.800	+10.800
87 conv	+8.800	+11.050	+9.800	
Ethanol	-3.250	+0.450	+0.450	nc
Jet fuel	+34.060	+29.810	+25.060	+25.060
ULSD	+25.060	+26.685	+24.060	+19.650
Bunker fuel \$/t	+55.000	+20.000		+35.000

CME Nymex futures	¢/USG	
Month	RBOB	ULSD
Apr	343.87	411.48
May	341.95	381.73
Jun	334.69	357.22
Jul	325.37	340.10
Aug	315.59	328.65
Sep	305.56	321.12

*Tables include hyperlinks to those values maintained in the Argus database.

ARGUS MARKET MAP

¢/USG



LATEST NEWS

PAGE 21

87M vs 83.7 Rbob Colonial

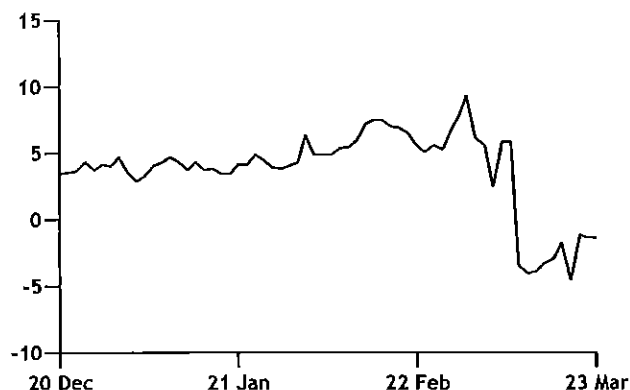
¢/USG

Infrastructure

- Limetree restart may require permit: EPA

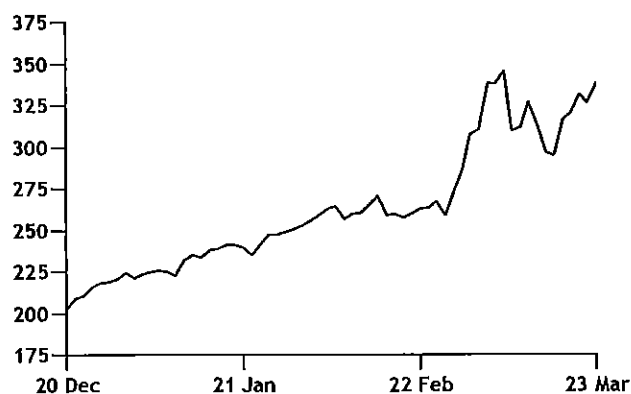
Industry

- US gasoline, diesel and jet stocks fall: EIA
- US jet fuel demand climbs to 7-month high
- US energy activity picked up in 1Q: Fed
- US states slash fuel taxes after prices spike
- Warm weather weighs on Tulsa ULSD prices
- Alaska crude output falls as USWC runs rise
- California gasoline sales rose in December
- US Senate bill targets ocean carriers' fees



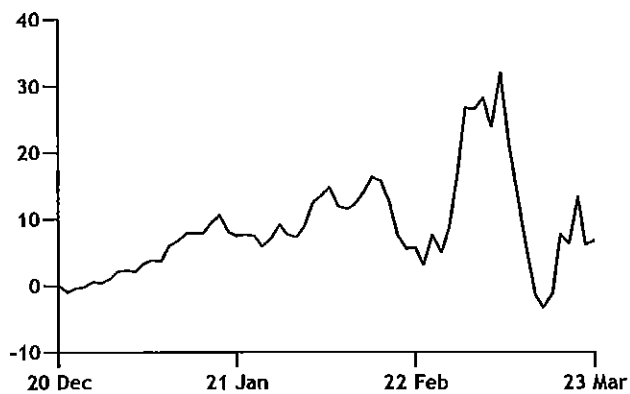
83.7 Rbob Colonial cash

¢/USG



Colonial ULSD vs Group Three ULSD

¢/USG



GASOLINE

Atlantic coast

US Atlantic coast RBOB cash prices reached a two-week high on Wednesday as rising futures offset declining cash differentials.

Prompt barge RBOB cash price rose by 9.05¢/USG to \$3.23/USG. Cash differentials fell by 1.75¢/USG at April Nymex -21¢/USG to -20¢/USG as offers tracked bids lower amid weak spot market demand. Buckeyes were even to barges. The forward curve was flat from the dead prompt through mid-April.

Buckeye, barge and Laurel CBOB were flat to RBOB.

Colonial offline A3 was offered at April Nymex -20¢/USG as differentials fell by 3.75¢/USG.

Colonial offline F3 was assessed flat to offline A3 at April Nymex -20¢/USG.

Colonial offline M3 differentials weakened by 2¢/USG to April Nymex -12¢/USG, partially mirroring losses in offline A3.

Refining margins fell by \$0.27/bl to \$23.95/bl as the rise in North Sea Dated outweighed gains in RBOB and ULSD cash prices.

Gulf coast

Gasoline prices at the US Gulf coast rebounded on Wednesday as underlying Nymex futures posted fresh gains amid expectations of expanded joint sanctions by the US and EU against Russia.

Conventional 87 finished gasoline rose by 11.05¢/USG in daily comparison to \$3.365/USG, its highest level since 8 March when prices peaked at multi-year highs.

Fresh data from the US Energy Information Administration (EIA) showed national gasoline stocks dropped by 1.2pc to 238mn bl during the week ended 18 March. This marked a seventh consecutive weekly decline and brought stocks to their lowest levels since the last week of December 2021.

Gasoline inventory draws were spurred by a 35.6pc weekly rise in exports to 1.058mn b/d, the highest level recorded since the week ending 7 December 2018, reflecting increased export demand amid the Russia-Ukraine conflict. Implied domestic demand for gasoline fell by 3.4pc to 8.637mn b/d.

Prompt cash differentials in the region were a mixed bag on Wednesday, generally holding within 0.25¢/USG of the previous day's midpoint.

Trades for 9.0 RVP regular CBOB were done from April Nymex -17.75¢ up to -16.25¢/USG, keeping the day's midpoint within 0.13¢/USG of the Tuesday's assessed levels. The forward curve continued to hold in a mild backwardation, with rolls

Atlantic coast			¢/USG	
	Basis	Differential	Price	±
New York waterborne				
87 conv inc duty 11.5	Apr	-13.00/-11.00	330.87-332.87	+8.80
87 conv ex duty 11.5	Apr	-30.32/-28.32	313.55-315.55	+8.60
Reg CBOB inc duty 12.9	Apr	-18.50/-17.50	325.37-326.37	+9.05
Reg CBOB ex duty 12.9	Apr	-35.81/-34.81	308.06-309.06	+8.85
Reg RBOB inc duty 13.5	Apr	-18.50/-17.50	325.37-326.37	+9.05
Reg RBOB ex duty 13.5	Apr	-35.81/-34.81	308.06-309.06	+8.85
89 conv inc duty 11.5			339.62-341.62	+9.50
Prem RBOB inc duty 13.5	Apr	+2.50/+3.50	346.37-347.37	+10.80
93 conv inc duty 11.5	Apr	+12.00/+14.00	355.87-357.87	+10.80
New York waterborne winter				
87 conv inc duty 11.5	Apr	-13.00/-11.00	330.87-332.87	+8.80
87 conv ex duty 11.5	Apr	-30.32/-28.32	313.55-315.55	+8.60
89 conv inc duty 11.5			339.62-341.62	+9.50
93 conv inc duty 11.5	Apr	+12.00/+14.00	355.87-357.87	+10.80
Boston waterborne				
Reg RBOB 13.5	Apr	-18.50/-18.00	325.37-325.87	+9.05
Colonial Linden				
87 conv M Cycle 15 11.5	Apr	-13.00/-11.00	330.87-332.87	+8.80
89 conv Cycle 15 11.5			339.80-341.45	+9.51
93 conv V Cycle 15 11.5	Apr	+12.50/+13.50	356.37-357.37	+10.80
Reg CBOB Cycle 15 11.5	Apr	-20.50/-19.50	323.37-324.37	+7.05
Reg RBOB Cycle 15 11.5	Apr	-20.50/-19.50	323.37-324.37	+6.55
Colonial Linden Winter				
87 conv M Cycle 15 11.5	Apr	-13.00/-11.00	330.87-332.87	+8.80
89 conv Cycle 15 11.5			339.80-341.45	+9.51
93 conv V Cycle 15 11.5	Apr	+12.50/+13.50	356.37-357.37	+10.80
Reg CBOB Cycle 15 11.5	Apr	-20.50/-19.50	323.37-324.37	+7.05
Reg RBOB Cycle 15 11.5	Apr	-20.50/-19.50	323.37-324.37	+6.55
New York barge				
Reg CBOB dead prompt 12.9	Apr	-21.00/-20.00	322.87-323.87	+9.05
Reg CBOB prompt 12.9	Apr	-21.00/-20.00	322.87-323.87	+9.05
Reg RBOB dead prompt 13.5	Apr	-21.00/-20.00	322.87-323.87	+9.05
Reg RBOB prompt 13.5	Apr	-21.00/-20.00	322.87-323.87	+9.05
Prem CBOB dead prompt 12.9	Apr	+2.75/+3.25	346.62-347.12	+10.80
Prem CBOB prompt 12.9	Apr	+2.75/+3.25	346.62-347.12	+10.80
Prem RBOB dead prompt 13.5	Apr	+0.25/+0.75	344.12-344.62	+10.80
Prem RBOB prompt 13.5	Apr	+0.25/+0.75	344.12-344.62	+10.80
Buckeye				
Reg CBOB dead prompt 12.9	Apr	-21.00/-20.00	322.87-323.87	+9.05
Reg CBOB prompt 12.9	Apr	-21.00/-20.00	322.87-323.87	+9.05
Reg RBOB dead prompt 13.5	Apr	-21.00/-20.00	322.87-323.87	+9.05
Reg RBOB prompt 13.5	Apr	-21.00/-20.00	322.87-323.87	+9.05
Prem CBOB dead prompt 12.9	Apr	+2.75/+3.25	346.62-347.12	+10.80
Prem CBOB prompt 12.9	Apr	+2.75/+3.25	346.62-347.12	+10.80
Prem RBOB dead prompt 13.5	Apr	+0.25/+0.75	344.12-344.62	+10.80
Prem RBOB prompt 13.5	Apr	+0.25/+0.75	344.12-344.62	+10.80
Laurel				
Reg CBOB 12.9	Apr	-21.00/-20.00	322.87-323.87	+9.05
Prem CBOB 12.9	Apr	+2.75/+3.25	346.62-347.12	+10.80

CME Nymex RBOB

Price			Crack spread	
Month	¢/USG	±	Month	\$/bl
Apr	343.87	+10.80	May	+28.69
May	341.95	+11.49	Jun	+28.58
Jun	334.69	+12.03	Jul	+28.01

GASOLINE

Atlantic coast summer supplemental					Gulf coast				
	Basis	Differential	Price	±		Basis	Differential	Price	±
New York waterborne					Colonial				
87 conv inc duty 11.5	Apr	-13.00/-11.00	330.87-332.87	+8.80	87 conv M 9.0 Cycle 18	Apr	-8.25/-6.50	335.62-337.37	+11.05
87 conv ex duty 11.5	Apr	-30.32/-28.32	313.55-315.55	+8.60	Weighted average		-7.38	336.49	
Reg RBOB inc duty 7.2	Apr	+6.00/+6.50	349.87-350.37	+10.80	87 conv M 9.0 Cycle 19	May	-6.33/-4.58	335.62-337.37	+11.05
Reg RBOB ex duty 7.2	Apr	-11.34/-10.84	332.53-333.03	+10.60	Reg RBOB F 7.4 Cycle 18	Apr	-6.75/-5.25	337.12-338.62	+11.05
89 conv inc duty 11.5			339.62-341.62	+9.50	Weighted average		-6.00	337.87	
Prem RBOB inc duty 7.2	Apr	+28.00/+28.50	371.87-372.37	+10.80	Reg RBOB F 7.4 Cycle 19	May	-4.83/-3.33	337.12-338.62	+11.05
93 conv inc duty 11.5	Apr	+12.00/+14.00	355.87-357.87	+10.80	Reg CBOB A 9.0 Cycle 18	Apr	-17.75/-16.25	326.12-327.62	+10.68
Boston waterborne					Weighted average		-16.90	326.97	
Reg RBOB 7.2	Apr	+5.75/+6.25	349.62-350.12	+10.80	Reg CBOB A 9.0 Cycle 19	May	-16.08/-14.58	325.87-327.37	+10.68
Colonial Linden Winter					89 conv 9.0			340.26-342.80	+10.27
87 conv M Cycle 15 11.5	Apr	-13.00/-11.00	330.87-332.87	+8.80	Prem CBOB D 9.0 Cycle 18	Apr	+3.00/+4.00	346.87-347.87	+10.93
89 conv Cycle 15 11.5			339.80-341.45	+9.51	93 conv V 9.0 Cycle 18	Apr	+5.00/+9.00	348.87-352.87	+8.80
93 conv V Cycle 15 11.5	Apr	+12.50/+13.50	356.37-357.37	+10.80	93 conv V 9.0 Cycle 19	May	+6.92/+10.92	348.87-352.87	+8.80
Reg CBOB Cycle 15 11.5	Apr	-20.50/-19.50	323.37-324.37	+7.05	Prem RBOB 7.4 Cycle 18	Apr	+11.00/+13.00	354.87-356.87	+10.80
Reg RBOB Cycle 15 11.5	Apr	-20.50/-19.50	323.37-324.37	+6.55	Prem RBOB 7.4 Cycle 19	May	+12.92/+14.92	354.87-356.87	+10.80
New York barge					Colonial Line Space				
Reg CBOB dead prompt 7.6	Apr	+0.50/+1.00	344.37-344.87	+10.80	Gasoline Line 01 Cycle 18			1.50/1.75	+0.13
Reg CBOB prompt 7.6	Apr	+0.50/+1.00	344.37-344.87	+10.80	Weighted average			1.63	
Reg CBOB dead prompt 8.8	Apr	-3.50/-3.00	340.37-340.87	+10.80	Waterborne				
Reg CBOB prompt 8.8	Apr	-3.50/-3.00	340.37-340.87	+10.80	Reg CBOB A 9.0	Apr	-16.50/-15.00	327.37-328.87	+10.68
Reg RBOB dead prompt 7.2	Apr	+3.50/+4.00	347.37-347.87	+10.80	87 conv M 9.0	Apr	-7.00/-5.25	336.87-338.62	+11.05
Reg RBOB prompt 7.2	Apr	+3.50/+4.00	347.37-347.87	+10.80	89 conv 9.0			341.51-344.05	+10.27
Prem CBOB dead prompt 7.6	Apr	+25.50/+26.00	369.37-369.87	+10.80	Prem CBOB 9.0	Apr	+4.25/+5.25	348.12-349.12	+10.93
Prem CBOB prompt 7.6	Apr	+25.50/+26.00	369.37-369.87	+10.80	93 conv V 9.0	Apr	+6.25/+10.25	350.12-354.12	+8.80
Prem CBOB dead prompt 8.8	Apr	+21.50/+22.00	365.37-365.87	+10.80	Waterborne ex-RVO				
Prem CBOB prompt 8.8	Apr	+21.50/+22.00	365.37-365.87	+10.80	Reg CBOB A 9.0	Apr	-31.97/-30.47	311.90-313.40	+10.49
Prem RBOB dead prompt 7.2	Apr	+25.50/+26.00	369.37-369.87	+10.80	87 conv M 9.0	Apr	-22.47/-20.72	321.40-323.15	+10.86
Prem RBOB prompt 7.2	Apr	+25.50/+26.00	369.37-369.87	+10.80	89 conv 9.0			326.04-328.58	+10.08
Buckeye					93 conv V 9.0	Apr	-9.22/-5.22	334.65-338.65	+8.61
Reg CBOB dead prompt 7.6	Apr	+0.50/+1.00	344.37-344.87	+10.80	Texas CBOB				
Reg CBOB prompt 7.6	Apr	+0.50/+1.00	344.37-344.87	+10.80	Reg Texas CBOB 9.0			326.87	+10.67
Reg CBOB dead prompt 8.8	Apr	-3.50/-3.00	340.37-340.87	+10.80	Prem Texas CBOB 9.0			347.37	+10.92
Reg CBOB prompt 8.8	Apr	-3.50/-3.00	340.37-340.87	+10.80	<i>see distillates section for Colonial Line 02 assessment</i>				
Reg RBOB dead prompt 7.2	Apr	+3.50/+4.00	347.37-347.87	+10.80	<i>weighted average is volume-weighted average of deals done during the entire trading day</i>				
Reg RBOB prompt 7.2	Apr	+3.50/+4.00	347.37-347.87	+10.80					
Prem CBOB dead prompt 7.6	Apr	+25.50/+26.00	369.37-369.87	+10.80					
Prem CBOB prompt 7.6	Apr	+25.50/+26.00	369.37-369.87	+10.80					
Prem CBOB dead prompt 8.8	Apr	+23.75/+24.25	367.62-368.12	+10.80					
Prem CBOB prompt 8.8	Apr	+23.75/+24.25	367.62-368.12	+10.80					
Prem RBOB dead prompt 7.2	Apr	+25.50/+26.00	369.37-369.87	+10.80					
Prem RBOB prompt 7.2	Apr	+25.50/+26.00	369.37-369.87	+10.80					
Laurel									
Reg CBOB prompt 8.8	Apr	-3.50/-3.00	340.37-340.87	+10.80					
Prem CBOB prompt 8.8	Apr	+21.50/+22.00	365.37-365.87	+10.80					

being done at +0.25¢/USG into the 19th cycle.

Regular 7.4 RVP RBOB remained valued at a roughly 11¢/USG premium over CBOB, as trade was done during the afternoon session at April Nymex -5.25¢/USG.

Trades at +1.5¢ and +1.75¢/USG for prompt cycle 18 line space lifted Colonial Pipeline gasoline line space higher for a third consecutive session.

Midcontinent

US midcontinent gasoline prices rebounded on Wednesday as Nymex gains lifted values to 11-session highs.

Chicago West Shore/Badger pipeline 9 RVP CBOB prices rose by 9.8¢/USG to \$3.328/USG even as cash differentials fell by 1¢/USG to April Nymex -11¢/USG. Differentials maintained a 1¢/USG discount to Wolverine Pipeline 9 RVP CBOB in the absence of fresh deals, bids, or offers on C3 March.

Wolverine CBOB traded at April Nymex -9¢/USG before the market softened, prompting offers to drop to -11¢/USG. Overall differentials were down by 1¢/USG in daily comparison.

Group 3 prompt 8.5 RVP V CBOB at Tulsa, Oklahoma, traded at April Nymex -23¢/USG, lifting differentials up by 1.63¢/USG after falling to seven-session lows in the previous session. Outright V prices increased by 12.43¢/USG to \$3.208/USG.

US midcontinent CBOB inventories fell by 2pc to 38.6mn bl last week, a 10-week low, Energy Information Administration (EIA) data show. Total gasoline stocks in the region declined by 1.2pc to 57.8mn bl, while RBOB stocks were unchanged at 6.4mn bl.

GASOLINE

Delivered Florida		¢/USG	
Origin	Price	±	
Port Everglades, Florida			
Reg CBOB A 9.0	USGC	335.17	+10.68
Prem CBOB D 9.0	USGC	355.67	+10.93
Tampa, Florida			
Reg CBOB A 9.0	USGC	334.33	+10.67
Prem CBOB D 9.0	USGC	354.83	+10.92

Delivered South America		\$/m3	
Origin	Price	±	
Montevideo, Uruguay			
87 conv ex-RVO	USGC	883.65	+26.25
Eurobob Oxy	ARA	846.94	+5.61
Buenos Aires, Argentina			
87 conv ex-RVO	USGC	886.03	+26.05
Eurobob Oxy	ARA	850.03	+5.65
Pozos, Colombia			
87 conv	USGC	908.53	+28.22
Barranquilla, Colombia			
87 conv	USGC	906.90	+28.27
Cartagena, Colombia			
87 conv	USGC	907.07	+28.29
Callao, Peru			
87 conv ex-RVO	USGC	902.43	+24.83

West coast

US west coast gasoline differentials were flat to higher on Wednesday as supplies increased last week.

Amid the final days of prompt March timing, Los Angeles regular CARBOB offers were shown at April Nymex +95¢/USG, though this level failed to entice a bid, leaving differentials unchanged. Bullish gasoline futures lifted cash prices higher by 10.8¢/USG to \$4.18/USG at the close.

April CARBOB ranges were reported from May Nymex +38¢/USG to +59¢/USG, down 2.5¢/USG on the day. Outright prices rose by nearly 9¢/USG to \$3.91/USG.

San Francisco CARBOB with April delivery traded at +40¢/USG, moving the differential midpoint higher by 5¢/USG. Cash prices in Northern California ended the day at \$3.82/USG, up 16.49¢/USG or 4.5pc.

Portland sub-octane gasoline in March was last seen from flat to the April Nymex to +2¢/USG. the midpoint increased by 3.5¢/USG and cash prices a further 16.3¢/USG to \$3.45/USG.

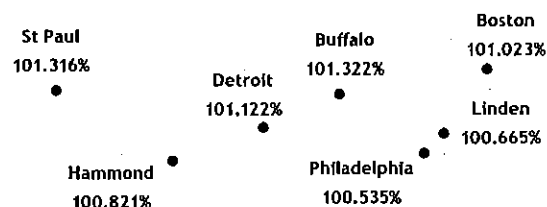
PADD 5 gasoline stockpiles rose to 29.1mn bl last week, up

Midcontinent		¢/USG	
Basis	Differential	Price	±
Group 3			
Suboctane V 8.5 prompt	Apr	-23.25/-22.75	320.62-321.12 +12.43
Weighted average		-23.00	320.87
Suboctane V 13.5 prompt	Apr	-31.25/-30.75	312.62-313.12 +12.43
Suboctane V 8.5 any Mar	Apr	-20.75/-20.25	323.12-323.62 +12.43
91 conv A 8.5 prompt	Apr	+9.75/+10.25	353.62-354.12 +10.80
91 conv A 10.0 prompt	Apr	+7.25/+7.75	351.12-351.62 +10.80
West Shore/Badger			
Reg CBOB 9.0 3rd Mar	Apr	-12.00/-10.00	331.87-333.87 +9.80
Reg CBOB 13.5 3rd Mar	Apr	-14.00/-12.00	329.87-331.87 +9.80
Reg CBOB 9.0 1st Apr	May	-10.10/-8.10	331.85-333.85 +9.79
87 conv 9.0 3rd Mar	Apr	-12.00/-10.00	331.87-333.87 +9.80
87 conv 13.5 3rd Mar	Apr	-14.00/-12.00	329.87-331.87 +9.80
87 conv 9.0 1st Apr	May	-10.10/-8.10	331.85-333.85 +9.79
89 conv 9.0			344.30-346.30 +9.80
89 conv 13.5			343.00-345.00 +9.80
91 conv 9.0 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
91 conv 13.5 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
91 conv 9.0 1st Apr	May	+25.40/+27.40	367.35-369.35 +9.79
Reg RBOB 7.4 3rd Mar	Apr	-2.00/0.00	341.87-343.87 +9.80
Reg RBOB 13.5 3rd Mar	Apr	-4.00/-2.00	339.87-341.87 +9.80
Reg RBOB 7.4 1st Apr	May	-0.10/+1.90	341.85-343.85 +9.79
Prem RBOB 7.4 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
Prem RBOB 13.5 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
Chicago BCX			
Reg CBOB 8.8 3rd Mar	Apr	-7.00/-5.00	336.87-338.87 +9.80
Reg CBOB 13.5 3rd Mar	Apr	-9.00/-7.00	334.87-336.87 +9.80
Reg CBOB 8.8 1st Apr	May	-5.10/-3.10	336.85-338.85 +9.79
91 conv 8.8 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
91 conv 13.5 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
Reg RBOB 7.4 3rd Mar	Apr	-2.00/0.00	341.87-343.87 +9.80
Reg RBOB 13.5 3rd Mar	Apr	-4.00/-2.00	339.87-341.87 +9.80
Prem RBOB 7.4 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
Prem RBOB 13.5 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
Chicago Wolverine			
Reg CBOB 9.0 3rd Mar	Apr	-11.00/-9.00	332.87-334.87 +9.80
Reg CBOB 13.5 3rd Mar	Apr	-13.00/-11.00	330.87-332.87 +9.80
91 conv 9.0 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
91 conv 13.5 3rd Mar	Apr	+23.50/+25.50	367.37-369.37 +9.80
Detroit			
Reg CBOB 13.5			333.87 +9.80
Prem CBOB 13.5			368.37 +9.80

West coast		¢/USG	
Basis	Differential	Price	±
Los Angeles			
Reg CARBOB 5.99 Mar	Apr	+53.00/+95.00	396.87-438.87 +10.80
Weighted average		+74.00	417.87
Reg CARBOB 5.99 Apr	May	+38.00/+59.00	379.95-400.95 +8.99
Prem CARBOB 5.99 Mar	CARBOB	+30.50/+31.50	448.37-449.37 +10.80
Suboctane 9.0 Mar	Apr	+59.00/+101.00	402.87-444.87 +10.80
Reg AZRBOB 8.0 Mar	CARBOB	+7.50/+8.50	425.37-426.37 +10.80
Prem AZRBOB 8.0 Mar	CARBOB	+38.50/+39.50	456.37-457.37 +10.80
San Francisco			
Reg CARBOB 5.99 Apr	May	+39.75/+40.25	381.70-382.20 +16.49
Prem CARBOB 5.99 Apr	CARBOB	+13.50/+14.50	395.45-396.45 +16.49
San Francisco waterborne			
Reg CARBOB 6.0 Apr	May	+41.25/+41.75	383.20-383.70 +16.49
Reg CARBOB ex-RVO 6.0 Apr	May	+25.78/+26.28	367.73-368.23 +16.30
Portland			
Suboctane 9.0 Mar	Apr	0.00/+2.00	343.87-345.87 +14.30

GASOLINE

Argus Gasoline Temperature Correction Factors (TCFs)



TCFs shown are for a specific terminal in that city. See TCF Methodology for details. For a given amount of fuel, the Argus TCF is the volume at 60° F divided by the volume at the real in-tank temperature. See all TCFs.

Spot crack spreads

Region	Basis	Yield	Spread	\$/bl
USAC	Brent	3-2-1	23.95	-0.27
USGC sweet	WTI Houston	3-2-1	33.08	+2.26
USGC sour	Mars	3-2-1	37.41	+2.22
Chicago	WCS	6-3-2-1	43.25	+0.79
Group Three	WTI Cushing	3-2-1	28.68	+2.08
USWC	ANS	5-3-1-1	45.92	+0.14

0.5mn bl, according to recent data from the Energy Information Administration (EIA).

Assessment rationale

The US Gulf coast regular CBOB market met the volume minimums needed to calculate the VWA in accordance with the methodology.

The US Gulf coast regular RBOB F market was assessed based on a regrade value of +11¢/USG to 9.0 RVP regular CBOB. Out-right trade for RBOB F was done within this range.

Chicago West Shore/Badger pipeline CBOB prices maintained a 1¢/USG discount to Wolverine Pipeline CBOB in the absence of fresh deals, bids, or offers.

Gulf coast deals

Grade	Timing	Price	Volume
Colonial A2	cycle 18	-17.75	20
	cycle 18	-17.75	25
	cycle 18	-17.50	25
	cycle 18	-16.75	25
	cycle 18	-16.25	50
	cycle 18	cycle 19 +0.25	50
Colonial D2	cycle 18	+3.50	25
Colonial F1	cycle 18	-5.25	25
Colonial M2	cycle 18	-8.25	25
Colonial line01	cycle 18	-6.50	25
	cycle 18	+1.50	25
	cycle 18	+1.75	25

Atlantic coast deals

Grade	Timing	Price	Volume
reg CBOB NYH barge (12.90)	26-27 Mar	Apr -20.00	50
reg RBOB F CPL (13.50)	cycle 13	Apr -20.00	25
reg RBOB NYH barge (13.50)	25-26 Mar	Apr -20.00	50
	28-30 Mar	Apr -20.50	50
	29-30 Mar	Apr -21.00	35

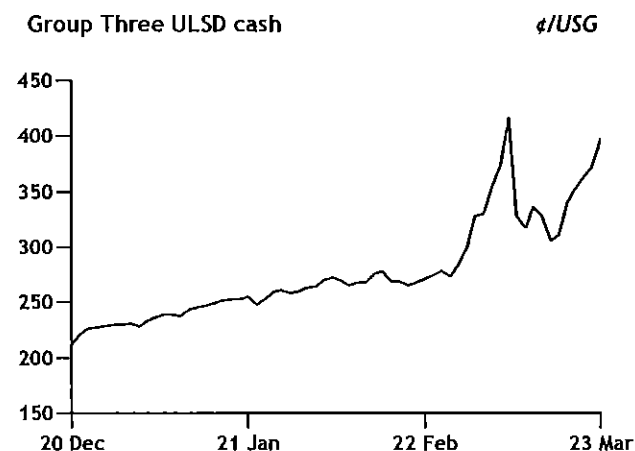
Midcontinent deals

Grade	Timing	Price	Volume
reg CBOB Wolverine (9.00)	C3 Mar	Apr -9.00	25
	C3 Mar	Apr -9.00	50

West coast deals

Grade	Timing	Price	Volume
reg CARBOB SF (5.99)	Apr	May +40.00	50

Group Three ULSD cash



DISTILLATES

Atlantic coast

US Atlantic coast ultra-low sulfur diesel (ULSD) and jet cash prices continued rising on Wednesday amid gains in the futures market.

Barge ULSD cash price reached its second highest point on Argus record at \$4.29/USG as futures rose by 25.06¢/USG. Cash differentials were stable at April Nymex +17.5¢/USG. Prompt Colonial offline ULSD traded at April Nymex +14¢/USG as differentials rose by 1.5¢/USG. Buckeye ULSD was assessed 0.25¢/USG higher than the previous day at April Nymex +12.5¢/USG to +13¢/USG, partially mirroring the gains in offline ULSD. The arbitrage from the US Gulf coast to New York Harbor remained open.

Barge ultra-low sulfur heating oil (ULSH) was stable at April Nymex -1¢/USG. Barges were bid at April Nymex -2.5¢/USG, yet the bid/ask spread was too wide to result in trade. Prompt Buckeye and Colonial offline ULSH remained at parity with barge ULSH.

Jet cash prices reached a 13-year high as rising cash differentials accompanied gains in futures. Prompt Buckeye jet cash price rose by 34.06¢/USG to \$4.11/USG as bid levels increased by 9¢/USG to April Nymex flat. Offers were scarce. Barge, Laurel and Colonial offline jet were flat to Buckeyes. The forward curve was backward by approximately 2.75¢/USG every five days from the prompt through mid-April. The arbitrage from the US Gulf coast to New York Harbor remained open. Regional spreads widened as gains in New York Harbor outweighed those in the Gulf coast market.

Gulf coast

US Gulf coast distillate prices firmed for a sixth consecutive session on Wednesday as the Nymex ultra-low sulphur diesel (ULSD) basis rose above \$4/USG for the second time in three weeks.

Futures gained as the US and EU prepare to announce expanded joint sanctions on Russia amid an already tight energy market.

CME Nymex ultra low-sulfur diesel

Price	Crack spread			
Month	¢/USG	±	Month	\$/bl
Apr	411.48	+25.06	May	+45.40
May	381.73	+22.15	Jun	+38.04
Jun	357.22	+19.26	Jul	+34.19

Atlantic coast		¢/USG			
	Basis	Differential	Price	±	
New York waterborne					
Heating oil	Apr	-28.00/-27.00	383.48-384.48	+25.06	
ULSD	Apr	+17.00/+18.00	428.48-429.48	+25.06	
Jet	Apr	-0.50/+0.50	410.98-411.98	+34.06	
Kerosine	Apr	+1.88/+2.88	413.36-414.36	+34.06	
ULSK	Apr	+19.00/+22.00	430.48-433.48	+28.56	
Boston waterborne					
ULSHO	Apr	+1.50/+2.00	412.98-413.48	+25.06	
New York barge					
Heating oil prompt	Apr	-28.00/-27.00	383.48-384.48	+25.06	
Heating oil any Mar	Apr	-28.00/-27.00	383.48-384.48	+25.06	
ULSHO	Apr	-2.50/+0.50	408.98-411.98	+25.06	
ULSD prompt	Apr	+17.00/+18.00	428.48-429.48	+25.06	
ULSD any Mar	Apr	+14.75/+17.50	426.23-428.98	+24.56	
Jet	Apr	-0.25/+0.25	411.23-411.73	+34.06	
Kerosine	Apr	+2.00/+2.75	413.48-414.23	+34.06	
ULSK	Apr	+19.00/+22.00	430.48-433.48	+28.56	
Buckeye					
ULSHO	Apr	-2.50/+0.50	408.98-411.98	+25.06	
ULSD	Apr	+12.50/+13.00	423.98-424.48	+25.31	
Jet	Apr	-0.25/+0.25	411.23-411.73	+34.06	
Kerosine	Apr	+2.00/+2.75	413.48-414.23	+34.06	
Laurel					
ULSHO	Apr	-2.50/+0.50	408.98-411.98	+25.06	
ULSD	Apr	+12.50/+13.00	423.98-424.48	+25.31	
Jet	Apr	-0.25/+0.25	411.23-411.73	+34.06	
Colonial Linden					
ULSHO Cycle 13	Apr	-2.50/+0.50	408.98-411.98	+25.06	
HO 77 Cycle 13	Apr	-28.00/-27.00	383.48-384.48	+25.06	
ULSD Cycle 13	Apr	+13.75/+14.25	425.23-425.73	+26.56	
Jet 54 Cycle 14	Apr	-0.25/+0.25	411.23-411.73	+34.06	

Gulf coast		¢/USG			
	Basis	Differential	Price	±	
Colonial					
ULSHO 67 Cycle 18	Apr	-22.57/-22.07	388.91-389.41	+26.50	
Heating oil 77 Cycle 18	Apr	-36.50/-35.50	374.98-375.98	+25.06	
Weighted average		-36.00	375.48		
Heating oil 77 Cycle 19	May	-6.75/-5.75	374.98-375.98	+25.06	
ULSD 62 Cycle 18	Apr	-7.50/-7.00	403.98-404.48	+26.69	
Weighted average		-7.21	404.27		
ULSD 62 Cycle 19	May	+18.00/+18.50	399.73-400.23	+27.44	
Jet 54 Cycle 18	Apr	-25.00/-14.00	386.48-397.48	+29.81	
Weighted average		-19.30	392.18		
Jet 54 Cycle 19	May	-1.75/+7.75	379.98-389.48	+23.31	
Kerosine 55 Cycle 18	Apr	-24.75/-13.75	386.73-397.73	+29.81	
Kerosine 55 Cycle 19	May	-1.50/+8.00	380.23-389.73	+23.31	
Colonial Line Space					
Distillates Line 02 Cycle 18			-0.45/-0.15	nc	
Waterborne					
Heating oil	Apr	-35.25/-34.25	376.23-377.23	+25.06	
ULSD 62	Apr	-6.25/-5.75	405.23-405.73	+26.69	
ULSD 62 ex-RVO	Apr	-21.72/-21.22	389.76-390.26	+26.50	
Jet 54	Apr	-23.75/-12.75	387.73-398.73	+29.81	
Kerosine 55	Apr	-23.50/-12.50	387.98-398.98	+29.81	

see gasoline section for Colonial Line 01 assessment; weighted average is volume-weighted average of deals done during the entire trading day

DISTILLATES

fob USGC		\$/m3	
	Origin	Price	±
ULSD 45 cetane ex-RVO	USGC	1037.56	+69.99
Delivered Florida		¢/USG	
	Origin	Price	±
Port Everglades, Florida			
ULSD 62	USGC	412.53	+26.69
Jet 54	USGC	400.28	+29.81
Tampa, Florida			
ULSD 62	USGC	411.69	+26.68
Jet 54	USGC	399.44	+29.81
Delivered South America		\$/m3	
	Origin	Price	±
Santos, Brazil			
ULSD ex-RVO	USGC	1073.21	+66.80
Jet	USGC	1078.61	+75.85
Rio de Janeiro, Brazil			
Jet	USGC	1077.87	+75.92
Paranagua, Brazil			
ULSD ex-RVO	USGC	1075.61	+66.61
Itaquai, Brazil			
ULSD ex-RVO	USGC	1062.34	+67.72
Jet	USGC	1068.10	+76.72
Suape, Brazil			
ULSD ex-RVO	USGC	1067.51	+67.29
Jet	USGC	1071.88	+76.40
Montevideo, Uruguay			
ULSD ex-RVO	USGC	1069.32	+67.13
Buenos Aires, Argentina			
ULSD ex-RVO	USGC	1072.02	+66.90
Pozos, Colombia			
ULSD	USGC	1090.70	+69.41
Barranquilla, Colombia			
ULSD	USGC	1088.75	+69.47
Jet	USGC	1055.10	+77.84
Cartagena, Colombia			
ULSD	USGC	1088.94	+69.48
Callao, Peru			
ULSD ex-RVO	USGC	1068.70	+69.01
Jet	USGC	1074.37	+77.89

Fresh data from the US Energy Information Administration (EIA) showed US diesel stockpiles fell by 1.8pc to 112.1mn bl in the week ending 18 March, amid a jump in domestic demand. This marked the lowest inventory levels recorded since the week ending 11 April 2014.

The drawdown was spurred by a 21.9pc rise in implied US demand to 4.516mn b/d.

Midcontinent		¢/USG			
	Basis	Differential	Price	±	
Group 3					
ULSD X prompt	Apr	-14.50/-13.50	396.98-397.98	+26.06	
Weighted average		-14.25	397.23		
ULSD X any Mar	Apr	-17.25/-16.25	394.23-395.23	+26.06	
Jet Q prompt	Apr	-14.00/-9.00	397.48-402.48	+25.06	
ULSK prompt	Apr	-15.00/-8.00	396.48-403.48	+9.91	
West Shore/Badger					
ULSD 3rd Mar	Apr	-22.25/-21.75	389.23-389.73	+24.06	
ULSD 1st Apr	May	+7.50/+8.00	389.23-389.73	+24.05	
Jet 3rd Mar	Apr	-20.25/-19.75	391.23-391.73	+25.06	
Jet 1st Apr	May	+9.50/+10.00	391.23-391.73	+25.05	
ULSK 3rd Mar	Apr	-4.75/-4.25	406.73-407.23	+24.06	
Chicago BCX					
ULSD BCX 3rd Mar	Apr	-22.00/-18.00	389.48-393.48	+23.06	
ULSD BCX 1st Apr	May	+7.75/+11.75	389.48-393.48	+23.05	
Chicago Wolverine					
ULSD 3rd Mar	Apr	-22.25/-21.75	389.23-389.73	+24.06	
West coast		¢/USG			
	Basis	Differential	Price	±	
Los Angeles					
Carb ULSD Apr	May	+22.00/+25.00	403.73-406.73	+19.65	
Weighted average		+23.50	405.23		
EPA ULSD Apr	May	+24.75/+25.25	406.48-406.98	+19.65	
Jet Mar	Apr	+4.00/+6.00	415.48-417.48	+25.06	
Weighted average		+5.00	416.48		
LAX					
Jet Mar	Apr	+3.50/+5.50	414.98-416.98	+25.06	
San Francisco					
Carb ULSD Mar	Apr	+21.50/+22.50	432.98-433.98	+25.06	
EPA ULSD Mar	Apr	+21.50/+22.50	432.98-433.98	+25.06	
Jet Mar	Apr	+4.00/+6.00	415.48-417.48	+25.06	
San Francisco waterborne					
Carb ULSD Mar	Apr	+23.00/+24.00	434.48-435.48	+25.06	
Carb ULSD ex-RVO Mar	Apr	+7.53/+8.53	419.01-420.01	+24.87	
Portland					
ULSD Mar	Apr	+23.50/+24.50	434.98-435.98	+25.06	

Prompt 62 grade ULSD differentials strengthened by 1.63¢/USG on the day, with deals occurring between April Nymex -7.5¢ and -7¢/USG.

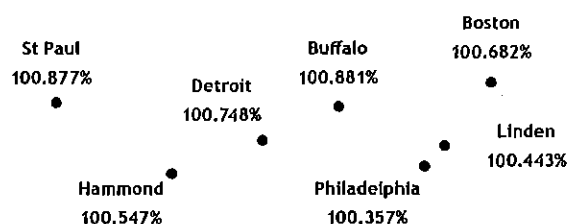
Gulf coast jet fuel prices gained nearly 30¢/USG on Wednesday as underlying futures and regional differentials surged higher amid scheduling of Colonial Pipeline's 18th cycle.

Trades for the prompt cycle were done within a wide range, with deals occurring from discounts of 25¢ up to 14¢/USG to the April Nymex basis. Backwardation in the forward curve for jet fuel rose sharply, with the prompt cycle roll see-

DISTILLATES

DEF bulk, 18 Mar 22			¢/USG
	Low	High	±
for Atlanta	139.00	146.00	nc
for Chicago	134.00	139.00	nc
for Dallas	132.00	134.00	nc
for Denver	138.00	140.00	nc
for Los Angeles	154.00	185.00	nc
for Philadelphia	145.00	155.00	nc

Argus Diesel Temperature Correction Factors (TCFs)



TCFs shown are for a specific terminal in that city. See TCF Methodology for details. For a given amount of fuel, the Argus TCF is the volume at 60° F divided by the volume at the real in-tank temperature. See all TCFs.

ing trade as high as +8¢/USG.

National jet fuel inventories last week dropped by 6.2pc to 36.4mn bl, the lowest level recorded since the week ending 14 January. Implied US jet demand rose by 20.1pc to 1.737mn b/d.

Midcontinent

Chicago diesel cash differentials continued to partially offset Nymex movement on Wednesday, as gains in the underlying benchmark lifted outright prices to 11-session highs while differentials pressed lower.

West Shore/Badger pipeline ultra-low sulphur diesel (ULSD) traded at April Nymex -22¢/USG, lowering differentials by 1¢/USG on C3 March. Outright prices firmed by 24.06¢/USG to \$3.894/USG, the highest since rising above 4¢/USG on 8 March.

Buckeye Complex (BCX) ULSD traded from April Nymex -18¢/USG to -20¢/USG, with offers pressing lower to -22¢/USG. This saw differentials shed 2¢/USG from the previous session. Outright prices for BCX ULSD were up by 23.06¢/USG to \$3.914/USG.

Gulf coast deals			
Grade	Timing	Price	Volume
Colonial 54	cycle 18	-25.00	25
	cycle 18	-25.00	25
	cycle 18	-21.00	25
	cycle 18	-20.00	25
	cycle 18	-20.00	25
	cycle 18	-20.00	25
	cycle 18	-17.25	25
	cycle 18	-16.75	25
	cycle 18	-14.00	25
	cycle 18	-14.00	25
	cycle 18	cycle 19 +7.00	25
	cycle 18	cycle 19 +8.00	25
Colonial 62	cycle 18	-7.50	25
	cycle 18	-7.50	25
	cycle 18	-7.50	25
	cycle 18	-7.25	25
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Group 3 prompt X ULSD at Tulsa, Oklahoma, traded from April Nymex -14.5¢/USG to -13.5¢/USG, rising by 1¢/USG.

Midcontinent ULSD stocks fell by 1.7pc to 28.5mn bl last week, while production declined by 2.6pc to 1.1mn b/d, Energy Information Administration (EIA) data show.

US midcontinent jet fuel cash differentials were stable as outright prices climbed on the back of Nymex gains.

Chicago jet prices rose by 6.33¢/USG to \$3.66/USG, while Group 3 prompt jet fuel prices at Tulsa, Oklahoma, increased by 6.33¢/USG to \$3.749/USG.

DISTILLATES

Jet fuel stocks in the midcontinent were down by 7.3pc to 7.6mn bl last week, per EIA estimates.

Group 3 prompt ultra-low sulphur kerosene (ULSK) was bid and offered at April Nymex -15¢/USG and -8¢/USG, respectively, causing differentials to reach the lowest since February 2015 and more than 23¢/USG below the 11.75¢/USG premium ULSK prices notched during the same session last year. Differentials fell amid forecasts of warmer weather in the region.

West coast

California jet fuel cash prices hit the highest level in over 13-year on Wednesday as Nymex futures surged 6.5pc.

March Los Angeles jet fuel differentials held a 5¢/USG premium to the April Nymex, again based on prior trade. Outright prices spiked over 25¢/USG higher amid rising futures, closing at 13-year highs at \$4.17/USG. Prompt timing is scheduled to roll to April tomorrow 24 March.

Jet fuel production on the US west coast increased by nearly 7pc last week to 324,000 b/d, EIA data showed. Stockpiles shrank to 9mn bl on the week, down 1.2mn bl as imports dropped from 91,000 b/d to 22,00 b/d over the period.

April Los Angeles EPA ULSD changed hands at May Nymex +25¢/USG, down 2.5¢/USG. Cash prices gained 19.65¢/USG to end the day at \$4.07/USG. Prompt in-state CARB diesel maintained a 1.5¢/USG discount to EPA ULSD based on prior trade and cash prices closed at \$4.05/USG.

Diesel production on the West coast increased by around 3.5pc last week to 515,000 b/d, and supplies rose by 0.4mn bl to 11.6mn bl.

Assessment rationale

The Colonial Linden ULSD assessment was based on a Colonial Linden ULSD trade.

The Buckeye ULSD assessment was based on its value in relation to Colonial Linden ULSD.

The barge ULSD assessment was based on its value in relation to Buckeye ULSD.

The US Gulf coast ULSD market was set even with the low and high trades.

The Colonial Linden ULSD assessment was based on its value in relation to Buckeye and barge ULSD.

The Buckeye jet assessment was based on a Buckeye jet bid level to set the midpoint.

Atlantic coast deals

Grade	Timing	Price	Volume
Diesel ULSD 62 CPL	cycle 13	Apr +14.00	25
	cycle 14	Apr +11.50	25
Heating oil 67 CPL	cycle 14	Apr -2.50	25
	cycle 15	Apr -2.50	25

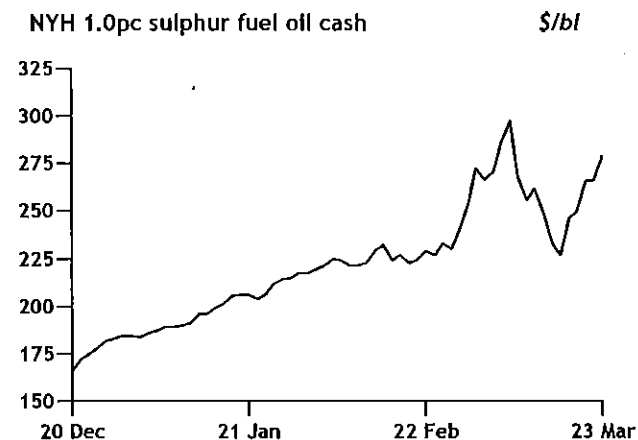
Midcontinent deals

Grade	Timing	Price	Volume
Diesel ULSD BCX	C3 Mar	Apr -20.00	25
	C3 Mar	Apr -20.00	25
	C3 Mar	Apr -18.00	30
Diesel ULSD MPL Group 3	prompt	Apr -14.50	10
	prompt	Apr -14.50	10
	prompt	Apr -14.50	50
	prompt	Apr -14.00	10
	prompt	Apr -13.50	10
	prompt	Apr -13.50	10

West coast deals

Grade	Timing	Price	Volume
Diesel CARB ULSD SF	Apr	May +50.00	25
Diesel EPA ULSD LA	Apr	May +25.00	25
	Apr	May +25.00	25

NYH 1.0pc sulphur fuel oil cash



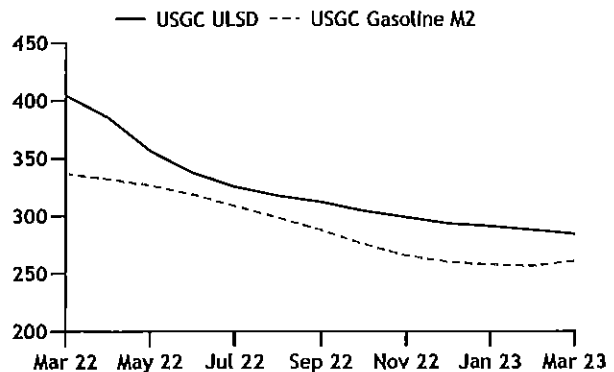
The barge jet assessment was based on a Buckeye jet bid level to set the midpoint as the delivery modes were deemed at parity.

CLEAN PRODUCT FORWARD CURVES

Physical					Physical (continued)				
Timing	Basis	Differential	Price	±	Timing	Basis	Differential	Price	±
87 conv M Colonial Linden					Jet New York barge				
Cycle 15	Apr	-13.00/-11.00	330.87-332.87	+8.80	Prompt	Apr	-0.25/+0.25	411.23-411.73	+34.06
Cycle 16	Apr	-7.00/-6.00	336.87-337.87	+10.80	10 days forward	May	+26.75/+27.25	408.48-408.98	+33.56
Cycle 17	Apr	-7.00/-6.00	336.87-337.87	+10.80	15 days forward	May	+24.00/+24.50	405.73-406.23	+33.06
Reg CBOB A Colonial Linden					20 days forward	May	+21.25/+21.75	402.98-403.48	+32.56
Cycle 15	Apr	-20.50/-19.50	323.37-324.37	+7.05	Jet Colonial Linden				
Cycle 16	Apr	-12.50/-12.35	331.37-331.52	+10.80	Cycle 14	Apr	-0.25/+0.25	411.23-411.73	+34.06
Cycle 17	Apr	-12.50/-12.35	331.37-331.52	+10.80	Cycle 15	Apr	-3.00/-2.50	408.48-408.98	+33.56
Reg RBOB New York barge					Cycle 16	Apr	-5.75/-5.25	405.73-406.23	+33.06
Prompt	Apr	-21.00/-20.00	322.87-323.87	+9.05	Kerosine New York barge				
10 days forward	May	-19.08/-18.08	322.87-323.87	+9.05	Prompt	Apr	+2.00/+2.75	413.48-414.23	+34.06
15 days forward	May	-19.08/-18.08	322.87-323.87	+9.05	10 days forward	May	+29.00/+29.75	410.73-411.48	+33.56
20 days forward	May	-19.08/-18.08	322.87-323.87	+9.05	15 days forward	May	+26.25/+27.00	407.98-408.73	+33.06
Any Mar	Apr	-21.00/-20.00	322.87-323.87	+9.05	20 days forward	May	+23.50/+24.25	405.23-405.98	+32.56
Prem RBOB New York barge					Heating oil Colonial 77				
Prompt	Apr	+0.25/+0.75	344.12-344.62	+10.80	Cycle 18	Apr	-36.50/-35.50	374.98-375.98	+25.06
10 days forward	May	+2.17/+2.67	344.12-344.62	+10.80	Cycle 19	May	-6.75/-5.75	374.98-375.98	+25.06
15 days forward	May	+2.17/+2.67	344.12-344.62	+10.80	Cycle 20	May	-6.75/-5.75	374.98-375.98	+25.06
20 days forward	May	+2.17/+2.67	344.12-344.62	+10.80	Cycle 21	May	-6.75/-5.75	374.98-375.98	+25.06
87 conv Colonial M					Heating oil Colonial 77 Linden				
Cycle 18	Apr	-8.25/-6.50	335.62-337.37	+11.05	Cycle 13	Apr	-28.00/-27.00	383.48-384.48	+25.06
Cycle 19	May	-6.33/-4.58	335.62-337.37	+11.05	Cycle 14	Apr	-28.00/-27.00	383.48-384.48	+25.06
Cycle 20	May	-6.33/-4.58	335.62-337.37	+11.05	Cycle 15	Apr	-28.00/-27.00	383.48-384.48	+25.06
Cycle 21	May	-6.33/-4.58	335.62-337.37	+11.05	ULSD Colonial 62				
Reg CBOB Colonial A					Cycle 18	Apr	-7.50/-7.00	403.98-404.48	+26.69
Cycle 18	Apr	-17.75/-16.25	326.12-327.62	+10.68	Cycle 19	May	+18.00/+18.50	399.73-400.23	+27.44
Cycle 19	May	-16.08/-14.58	325.87-327.37	+10.68	Cycle 20	May	+16.00/+16.50	397.73-398.23	+26.44
Cycle 20	May	-16.08/-14.58	325.87-327.37	+11.13	Cycle 21	May	+15.00/+15.50	396.73-397.23	+26.44
Cycle 21	May	-16.08/-14.58	325.87-327.37	+11.58	Jet Colonial 54				
Heating oil New York barge					Cycle 18	Apr	-25.00/-14.00	386.48-397.48	+29.81
Prompt	Apr	-28.00/-27.00	383.48-384.48	+25.06	Cycle 19	May	-1.75/+7.75	379.98-389.48	+23.31
10 days forward	May	+1.75/+2.75	383.48-384.48	+25.06	Cycle 20	May	-4.75/+3.75	376.98-385.48	+20.31
15 days forward	May	+1.75/+2.75	383.48-384.48	+25.06	Cycle 21	May	-6.25/+1.75	375.48-383.48	+18.81
20 days forward	May	+1.75/+2.75	383.48-384.48	+25.06	Refined products swaps				
Any Mar	Apr	-28.00/-27.00	383.48-384.48	+25.06					
ULSH Colonial Linden									
Cycle 13	Apr	-2.50/+0.50	408.98-411.98	+25.06					
Cycle 14	Apr	-2.75/-2.25	408.73-409.23	+24.31					
Cycle 15	Apr	-2.75/-2.25	408.73-409.23	+25.06					
ULSD New York barge									
Prompt	Apr	+17.00/+18.00	428.48-429.48	+25.06					
10 days forward	May	+44.50/+45.50	426.23-427.23	+24.56					
15 days forward	May	+42.25/+43.25	423.98-424.98	+24.06					
20 days forward	May	+40.00/+41.00	421.73-422.73	+23.56					
Any Mar	Apr	+14.75/+17.50	426.23-428.98	+24.56					
ULSO Colonial Linden									
Cycle 13	Apr	+13.75/+14.25	425.23-425.73	+26.56					
Cycle 14	Apr	+11.25/+11.75	422.73-423.23	+25.81					
Cycle 15	Apr	+9.25/+9.75	420.73-421.23	+25.56					

Refined products swaps

¢/USG



— Argus US Refined Products Forward Curves

BIOFUELS AND BLENDING COMPONENTS

RINs	Low	High	¢/RIN
Renewable fuel (ethanol D6)			
Weighted average		115.38	
2020	113.75	116.75	+1.25
2021	114.00	117.00	+1.75
2022	114.00	117.00	+2.00
Biomass-based diesel (D4)			
2020	167.00	169.00	+2.75
2021	165.25	167.25	-1.00
2022	149.00	151.00	+0.25
Cellulosic biofuels (D3)			
2020	313.00	318.00	+6.00
2021	315.00	320.00	+5.00
2022	285.00	290.00	+2.50
Advanced biofuels (D5)			
2020	166.00	168.00	+2.75
2021	164.25	166.25	-1.00
2022	148.00	150.00	+0.25
Renewable volume obligation (RVO) ¢/USG			
2021		14.54	+0.13
2022		15.47	+0.19

RIN spreads	Today	±	Prior day	5-day avg
Category spreads, 2021				
Biodiesel D4-ethanol D6	50.750	-2.750	53.500	53.250
Biodiesel D4-advanced biofuel D5	1.000	nc	1.000	1.000
Advanced biofuel D5-ethanol D6	49.750	-2.750	52.500	52.250
Category spreads, 2022				
Biodiesel D4-ethanol D6	34.500	-1.750	36.250	36.200
Biodiesel D4-advanced biofuel D5	1.000	nc	1.000	1.000
Advanced biofuel D5-ethanol D6	33.500	-1.750	35.250	35.200
Vintage spreads, 2021-2022				
Biodiesel D4	16.250	-1.250	17.500	17.300
Advanced biofuel D5	16.250	-1.250	17.500	17.300
Ethanol D6	0.000	-0.250	0.250	0.250

Tier 3 (CCO)	Low	High	\$/mn USG credits
Standard	310.00	350.00	nc

Benzene credits	Low	High	¢/USG
CCO	35.00	45.00	nc

Sustainable aviation fuel (SAF)	Bid	Ask	¢/USG
SAF del US west coast	1371.08	1377.68	82.69

Ethanol

Ethanol prices lacked coherent direction on Wednesday amid conflicting signals from higher corn futures settles and bearish ethanol supply figures from the Energy Information Administra-

Ethanol	Low	High	¢/USG
Chicago			
Argo same-day	246.75	249.75	
Argo in-tank prompt	247.00	250.00	+0.45
Weighted average		247.32	
Argo in-tank any Mar	247.00	250.00	+0.75
Rule 11 rail prompt	247.00	249.00	-0.50
New York Harbor			
Barge any Mar	249.00	253.00	-3.25
US Gulf coast/south			
Houston barge/rail	256.40	260.40	+0.45
Tampa rail	264.25	267.75	+0.45
Atlanta rail	255.25	259.75	+0.45
Dallas rail	251.40	256.40	+0.45
Nebraska			
Union Pacific rail	227.50	229.00	+1.00
BNSF rail	227.50	229.00	+1.00
Los Angeles			
Low-carbon intensity rail	252.30	262.30	nc
Brazil			
fob anhydrous \$/m3	717.00	791.00	+5.00
fob anhydrous BRL/m3	3,480.39	3,839.59	-27.42
del anhydrous \$/m3	744.00	758.00	+0.50
del anhydrous BRL/m3	3,611.45	3,679.41	-49.36

Biodiesel	Differential	Price	¢/USG
New York Harbor fob barge			
B100 SME Apr	+317.50/+322.50	728.98-733.98	+25.31
B99 SME Apr	-10.00/0.00	401.48-411.48	+25.06
Houston rail/barge			
B100 SME Apr	+316.00/+320.00	727.48-731.48	+28.31
B99 SME Apr	-9.00/-5.00	402.48-406.48	+28.06
Chicago in-tank transfer Argo			
B100 SME Apr	+315.00/+325.00	726.48-736.48	+25.31
B99 SME Apr	-7.50/-2.50	403.98-408.98	+25.06
San Francisco fob			
B99 FAME Apr	-65.00/-55.00	346.48-356.48	+20.06
Los Angeles fob			
B99 FAME Apr	-60.00/-50.00	351.48-361.48	+20.06

Renewable diesel	Price	¢/USG
Los Angeles R99	433.57-442.57	+19.25
San Francisco R99	461.82-470.82	+24.66

50:50 split of retroactive blenders tax credit (BTC)	¢/USG
Credit	
BTC	0.00

tion (EIA).

Front month CBOT corn futures rose by 4.75¢/bushel to 757.75¢/bushel, while the July contract increased by 5¢/bushel to 734.75¢/bushel. Support stemmed from bullish market sentiment toward expectations of reduced corn acreages out of Ukraine.

BIOFUELS AND BLENDING COMPONENTS

Domestic ethanol inventories for the week ended 18 March were reported at 26.15mn bl, up from the week before by 0.8pc. The last time stocks were higher was the week ended 24 April 2020 amid government lockdown orders meant to curb the initial spread of the Covid-19 virus. US ethanol production increased by 1.6pc to 1.04mn b/d on the week, reaching a nine-week high.

Chicago Rule 11 railcars with timing for this week fell by 0.5¢/USG to 248¢/USG. Pre-EIA stats bids at 249¢/USG set the high, while trade later in the session at 247¢/USG set the low. Additional volumes exchanged hands at 247.5¢/USG.

Prompt in-tank transfers at Kinder Morgan's Argo terminal ticked up by 0.45¢/USG to 248.5¢/USG. Prompt barrels were valued flat to March anys, which traded as high as 250¢/USG. After midday, prompt volumes transacted as low as 247¢/USG.

Front month barges at New York Harbor were bid at 249¢/USG and offered at 253¢/USG, weakening by 3.25¢/USG to 251¢/USG.

Washington railcars with timing for this week declined by 1¢/USG based on trade at 259¢/USG.

Iowa and Nebraska fob railcars on the Union Pacific line

Biofuel spreads

	Differential
Ethanol crush \$/bushel	-1.53
Heating oil-soybean oil ¢/USG	-1.58

Futures

	Settlement	±
CBOT ethanol ¢/USG		
Apr 22	216.00	nc
May 22	216.00	nc
Jun 22	216.00	nc
Jul 22	216.00	nc
CBOT corn ¢/bushel		
May 22	757.75	+4.75
Jul 22	734.75	+5.00
Sep 22	687.50	+2.25
Dec 22	672.25	+2.25
CBOT soybean oil ¢/lb		
May 22	75.97	+1.43
Jul 22	72.96	+0.79
Aug 22	70.21	+0.40
Sep 22	68.30	+0.23
CBOT soybeans ¢/bushel		
May 22	1,718.75	+22.25
CBOT soybean meal \$/t		
May 22	485.10	+8.30

Ethanol forward curves

	Chicago	New York
Mar	247.00-250.00	249.00-253.00
Apr	249.00-252.00	252.00-256.00
May	250.00-253.00	254.50-258.50
Jun	249.00-252.00	254.00-258.00

Blendstocks

	Basis	Differential	Price	±
Alkylate				
NY barge ex duty	Apr	-1.00/0.00	342.87-343.87	+10.80
Houston	87 NLT 9 RVP	+13.00/+15.00	349.50-351.50	+11.05
Raffinate				
Houston	87 NLT 9 RVP	-52.00/-48.00	284.50-288.50	+8.05
Reformate				
NY barge ex duty	Apr	+27.50/+28.00	371.37-371.87	+10.80
Houston	87 NLT 9 RVP	+40.00/+44.00	376.50-380.50	+10.05

MTBE

	Price	±
fob USGC	373.50-374.50	+11.00

Carbon

Vintage	Del	Bid	Ask	Price	±
California carbon allowances (CCA) \$/t					
2022	Mar 22	27.25	27.35	27.30	+0.20
2022	Dec 22	28.10	28.20	28.15	+0.15
2023	Dec 23	29.65	29.75	29.70	+0.15
CCA price ¢/USG		Winter		Summer	
Regular CARBOB		21.94	+0.16	22.00	+0.16
Month Index Feb				22.75	-1.78
Midgrade CARBOB		21.94	+0.16	21.95	+0.16
Month Index Feb				22.70	-1.77
Prem CARBOB		21.96	+0.16	21.91	+0.16
Month Index Feb				22.66	-1.76
ULSD				27.95	+0.21
Month Index Feb				28.90	-2.26
Quebec carbon price for gasoline, diesel CA¢/l					
Gasoline				7.70	+0.05
Gasoline month Index Feb				8.05	-0.55
Diesel				9.57	+0.05
Diesel month index Feb				10.02	-0.68
California low-carbon fuel credits (LCFS) \$/t					
LCFS		112.00	116.00	114.00	-4.50
VWA MTD					132.41
Number of trades MTD					3
Volume MTD					11,000
Oregon low-carbon fuel credits (LCFS) \$/t					
LCFS		115.00	121.00	118.00	-2.00
California LCFS premium per carbon intensity point ¢/USG					
Ethanol				0.93	-0.04
Biodiesel				1.44	-0.05
California LCFS cost for gasoline, diesel ¢/USG					
CARBOB				13.88	-0.55
ULSD				15.39	-0.61
Crude CI deficit Carbob				1.25	-0.05
Crude CI deficit diesel				1.41	-0.06

BIOFUELS AND BLENDING COMPONENTS

Ethanol deals				RINS deals			
Grade	Timing	Price	Volume	Grade	Timing	Price	Volume
Chicago Argo	28 Mar-27 Apr	247.00	5	Advanced Biofuel	2020	166.00	2324
	28 Mar-27 Apr	247.10	5		2020	168.00	2324
	28 Mar-27 Apr	247.50	5	Biodiesel	2022	149.00	3000
	28 Mar-27 Apr	247.50	5		2022	150.00	150
	28 Mar-27 Apr	247.50	5		2022	150.00	360
Chicago Rule 11	23-28 Mar	247.50	4		2022	150.00	500
	24-26 Mar	247.50	4		2022	150.00	2000
	24-26 Mar	247.50	4		2022	150.50	2000
	28 Mar-27 Apr	247.00	4	Cellulosic	2022	285.00	250
Nebraska UP	23-26 Mar	227.50	4	Ethanol	2022	290.00	500
	23-26 Mar	227.50	4		2021	115.00	1000
	27 Mar-2 Apr	229.00	4		2021	115.25	1000
Washington	23-26 Mar	259.00	4		2021	115.75	6500
	23-26 Mar	259.00	4		2022	114.00	1000
					2022	114.50	1000
					2022	114.50	2000
					2022	115.00	500
					2022	115.00	500
					2022	115.00	500
					2022	115.00	1000
					2022	115.00	1000
					2022	115.00	1000
					2022	115.00	1000
					2022	115.00	1000
					2022	115.50	250
					2022	115.50	500
					2022	115.50	500
					2022	115.50	750
					2022	115.50	1500
					2022	115.50	6500
					2022	115.75	350
					2022	116.00	500
					2022	116.00	500
					2022	116.00	500
					2022	116.00	650
					2022	116.00	2000
					2022	116.25	350
					2022	116.50	500
					2022	116.50	750
					2022	117.00	500

with timing for this week exchanged hands at 227.5¢/USG. Railcars for next week traded at 229¢/USG. The assessment firmed on the day by 1¢/USG to 228.25¢/USG.

Brazil

The ongoing recovery of the Brazilian real relative to the US dollar maintained the uptrend in sugarcane anhydrous export values Wednesday.

The Brazilian specification to be shipped from the port of Santos rose by \$5/m³ to \$717-791/m³ fob over higher offers.

Imported corn anhydrous settled between \$744-758/m³ cif Brazil, up by \$0.5/m³ from the previous session as stronger corn futures compensated for lower stocks in the week ended 18 March, according to data from the Energy Administration Information (EIA).

In the state of Sao Paulo, ex-mill hydrous ethanol prices increased by R11/m³ to R3,932/m³, supported by solid demand in the domestic marketplace. Aware of the buying interest and the limited number of mills in activity, producers increased offers throughout the day, leading some retailers to seek product in other Center South states.

RINs

RIN credit prices posted gains across all D types on Wednesday to support the Argus Renewable Volume Obligation (RVO).

The Argus RVO rose on the day by 0.19¢/USG to 15.47¢/USG.

Current year ethanol D6 RIN credits firmed on the day by 2¢/RIN to 115.5¢/RIN as trade surfaced between 114¢/RIN and

117¢/RIN. Buyer interest steadily rose throughout the session to support value. Prior year D6 credits traded flat to current year ethanol RINs, rising by 1.75¢/RIN to 115.5¢/RIN. Outright trade emerged as low as 115¢/RIN and as high as 115.75¢/RIN.

Biomass-based diesel D4 RIN credits for the 2022 compliance year ticked up by 0.25¢/RIN to 150¢/RIN. Trade peaked at

BIOFUELS AND BLENDING COMPONENTS

151¢/RIN early in the session and then went as low as 149¢/RIN following that. Value ticked up by 0.25¢/RIN to 150¢/RIN.

2020 advanced biofuel D5 RIN credits rose by 2.75¢/RIN to 167¢/RIN with deals done at 166¢/RIN and 168¢/RIN.

Cellulosic biofuel D3 credits traded at 285¢/RIN and then 290¢/RIN, increasing by 2.5¢/RIN to 287.5¢/RIN.

Biodiesel

B99 differentials were mixed on Wednesday, as Houston values rose and west coast discounts moved lower.

Houston B99 discounts rose by 3¢/USG to Nymex -7¢/USG. Fob trucks for April exchanged hands at Nymex -9¢/USG, which market participants pegged at a 4¢/USG discount to fob barges, putting the high for the *Argus* assessment at Nymex -5¢/USG. Truck offers also surfaced at Nymex -13¢/USG for a fob barge equivalent of Nymex -9¢/USG. B100 premiums in the same region increased by 3.25¢/USG to Nymex +318¢/USG.

New York Harbor B99 discounts were steady at Nymex -5¢/USG as no fresh indications surfaced, while B100 premiums ticked up by 0.25¢/USG to 320¢/USG.

Chicago B99 differentials were also unchanged at Nymex -5¢/USG, as no new information emerged. B100 premiums rose by 0.25¢/USG to Nymex +320¢/USG.

San Francisco FAME B99 differentials fell by 5¢/USG to Nymex -60¢/USG as trucks with April timing traded at that level. Los Angeles B99 values tracked those for San Francisco, declining by 5¢/USG to Nymex -55¢/USG.

The 2022 vintage D4 RIN credits ticked up by 0.25¢/USG to 150¢/USG.

The April Nymex heating oil benchmark jumped by 25.06¢/USG to 411.48¢/USG, while front month CBOT soybean oil futures rose by 1.43¢/lb to 75.97¢/lb. Biodiesel blend margins as measured by the heating oil-soybean oil (HOB0) spread rose by 15¢/USG to -158¢/USG.

Argentina

Export differentials for Argentinian soybean oil cargoes shipments strengthened for a second session, with buyers increasing bid levels.

April physical markets settled at CBOT +2.45¢/lb, ticking 0.1¢/lb up from the prior session. Bids hiked by 0.2¢/lb, while offers remained the same.

On the May front, premiums stood stable at CBOT +0.8¢/lb.

For the June and July strip, discounts shifted to premiums

after both buyers and sellers raised prices by 1.4¢/lb to CBOT +0.6¢/lb.

May CBOT contracts ended the day 1.43¢/lb higher at 75.97¢/lb.

RED-certified biodiesel inched lower by \$2.8 to \$1,496/ton a fob basis.

California carbon

Steadily falling California Low Carbon Fuel Standard (LCFS) credits picked up speed today with an almost 4pc drop in the spot price.

Spot and first quarter 2022 credits each fell by \$4.50 to \$114/metric tonne, where spot credits were heard to trade. Third quarter credits fell by \$7 and fourth quarter credits by \$5.50 to \$110/t.

Oregon Clean Fuel Program maintained their unusual premium to LCFS credits after falling by \$2 to \$118/t.

Supplies of credit-generating fuels have outpaced the recovery in gasoline demand, which accounts for nearly 80pc of LCFS deficits. State gasoline sales in the fourth quarter were 7pc lower than the same period of 2019, based on the latest state fuel tax data. Full year gasoline sales were 10pc lower than pre-coronavirus levels recorded in 2019. Fourth quarter taxable sales of diesel, including renewable diesel and biodiesel, were 5pc lower than the preceding quarter but 4pc higher than the same period of 2019. Renewable diesel made up nearly a third of new credits generated in the third quarter of 2021.

Reformulated gasoline inventories including CARBOB rose by 5.6pc last week to 13.1mn bl in the west coast region that includes Alaska and Hawaii. That volume was about 1.3pc lower than the same week of 2019.

West coast ultra-low sulfur diesel inventories rose by 3.7pc to 11.6mn bl, lower by 8.5pc compared to the same week of 2019.

US implied gasoline demand fell by 3.4pc last week to 8.6mn b/d, lower by 5.3pc compared to the same week of 2019. US implied diesel demand rose by 22pc to 4.5mn b/d, higher by 7.1pc compared to the same week of 2019.

California Carbon Allowances (CCAs) added to yesterday's gains as market activity picked up today.

Prompt-month allowances climbed by 20¢ to \$27.30/metric tonne. The contract traded 16 times for 799,000t.

December 2022 allowances rose by 15¢ to \$28.15 /t, after

BIOFUELS AND BLENDING COMPONENTS

trading 64 times for 945,000t.

The contract fell 40¢ on Monday, but has since regained 35¢ this week as the allowances remain slightly lower compared with last week when the contract settled at \$28.30/t.

December 2023 CCAs moved up by 15¢ to \$29.70/t. The contract traded three times today for 50,000t.

Blending components

The US Gulf coast gasoline blendstock cash differentials trended lower on Wednesday.

The declines made little difference as the US Gulf coast gasoline pipeline mean (PLM) ran another 11¢/USG higher.

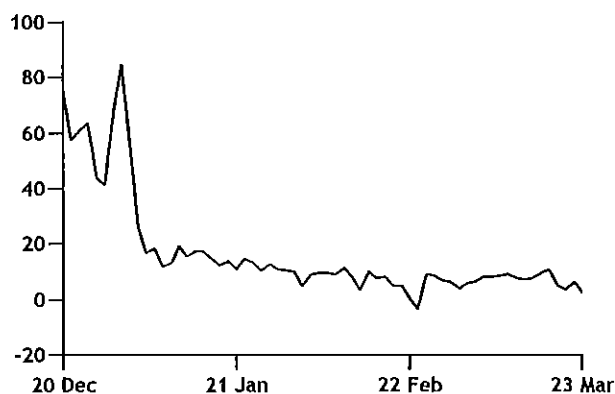
Raffinate weakened in sympathy with the naphtha markets to PLM -50¢/USG, a decline of 3¢/USG.

Reformate also shifted lower, slipping 1¢/USG, to PLM +42¢/USG.

Alkylate was stable at PLM +14¢/USG.

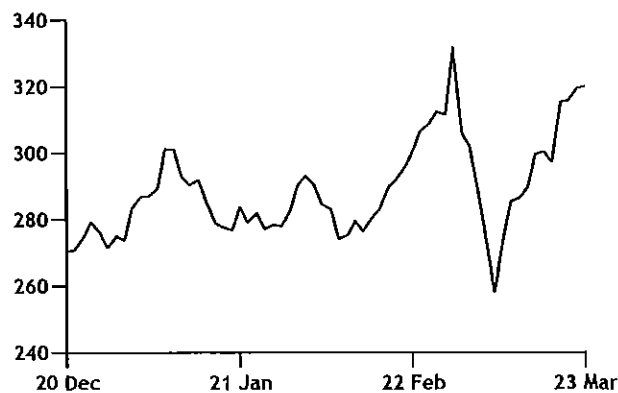
NYH ethanol vs Chicago ethanol

¢/USG



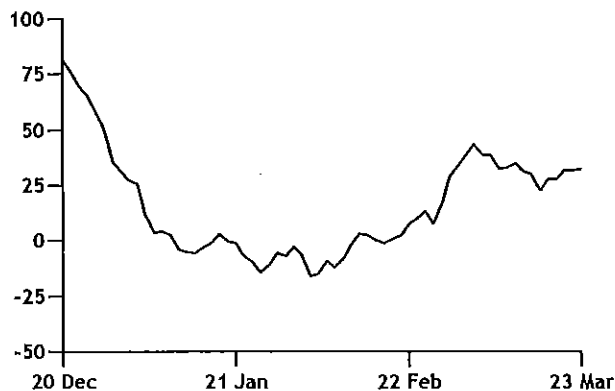
SME Chicago fob B100 vs Nymex heating

¢/USG



Physical Chicago vs CBOT ethanol futures

¢/USG



FEEDSTOCKS AND RESIDUAL FUEL OIL

Vacuum gasoil

The VGO market remained in a state of flux amid a combination of short prompt supply, a significant crude backwardation and prevailing uncertainty on forward cargo supply.

Elevated US VGO prices were noted to have drawn more European imports in the March, according to shipping reports, with cargoes heading mostly to the Gulf coast and lesser volumes to the west and east coasts.

Over half a million tons of VGO was noted to be moving from Europe to the US in March, according to Vortexa and other shipping reports, but not all have been confirmed to be arriving at US ports.

On the domestic US front, VGO cargo discussions stayed muted. There had been no specific cargo discussions fielded openly in March. The US sanction on Russian oil imports was announced on 8 March, but transactions that were completed before the date have a grace period to arrive through around mid-April.

However, any cargo talks were not readily revealed, as was the case for prompt VGO barges as well in the current thin market.

VGO differentials to Brent crude were stagnant, although upward pressure was widely acknowledged in a persistently short market.

Fluid catalytic cracker (FCCs) have mostly restarted from planned and unplanned shutdowns at the Gulf coast, which would increase VGO consumption in the shorter run.

A FCC at a Corpus Christi refinery was heard to have resumed operations this week. The refiner was not openly noticed in the VGO market.

In the low sulphur area, only atmospheric bottoms (ATBs) were heard available, but specific deals and discussions were elusive.

Prices for low sulphur VGO barges remained tagged at May Brent +\$18.5/bl on a delivered Gulf coast basis.

CME Nymex

	Price	±
WTI crude \$/bl		
May	114.93	
Jun	111.99	
Jul	108.65	
Henry Hub natural gas \$/mmbtu		
Apr	5.232	+0.04
May	5.274	+0.05

Vacuum gasoil Gulf coast

	Basis	Differential	Price
Differential to WTI \$/bl			
0.5% cargo	May	+25.25/+26.00	140.18-140.93
0.5% barge	May	+24.75/+25.50	139.68-140.43
1.0% cargo	May	+24.25/+25.00	139.18-139.93
1.0% barge	May	+23.75/+24.50	138.68-139.43
2.0% cargo	May	+23.25/+24.00	138.18-138.93
2.0% barge	May	+22.75/+23.50	137.68-138.43
Differential to Ice Brent \$/bl			
0.5% cargo	May	+18.58/+19.33	140.18-140.93
0.5% barge	May	+18.08/+18.83	139.68-140.43
1.0% cargo	May	+17.58/+18.33	139.18-139.93
1.0% barge	May	+17.08/+17.83	138.68-139.43
2.0% cargo	May	+16.58/+17.33	138.18-138.93
2.0% barge	May	+16.08/+16.83	137.68-138.43
Differential to 70:30 87 conv/heating oil ¢/USG			
0.5% cargo		-15.68/-13.89	333.76-335.55
0.5% barge		-16.87/-15.08	332.57-334.36
1.0% cargo		-18.06/-16.27	331.38-333.17
1.0% barge		-19.25/-17.46	330.19-331.98
2.0% cargo		-20.44/-18.66	329.00-330.79
2.0% barge		-21.63/-19.85	327.81-329.60
Differential to 70:30 87 conv/ULSD ¢/USG			
0.5% cargo		-24.30/-22.52	333.76-335.55
0.5% barge		-25.49/-23.71	332.57-334.36
1.0% cargo		-26.69/-24.90	331.38-333.17
1.0% barge		-27.88/-26.09	330.19-331.98
2.0% cargo		-29.07/-27.28	329.00-330.79
2.0% barge		-30.26/-28.47	327.81-329.60
70:30 formulas ¢/USG			
87 conv waterborne/heating oil		+15.25	348.68-350.20
87 conv waterborne/ULSD		+15.74	357.38-358.75

Naphtha barge Gulf coast

	Basis	Differential	Price
Heavy (40 N+A) ¢/USG	87 NLT 9 RVP	-66.00/-62.75	271.75-275.00
Heavy (40 N+A) \$/t			967.43-979.00
Full range ¢/USG	87 NLT 9 RVP	-69.00/-66.75	268.75-271.00
Full range \$/t			975.56-983.73
LSR/LV ¢/USG	C5	-9.00/-6.00	259.00-266.00
LSR/LV \$/t			1030.82-1058.68
Natural gasoline ¢/USG			268.00-272.00
Natural gasoline \$/t			1125.60-1142.40

Light cycle oil

	Basis	Differential	Price	±
0.5% sulphur	HO pipe	+8.00/+10.00	383.48-385.48	+20.31
2.0 % sulphur	HO pipe	+7.00/+9.00	382.48-384.48	+21.31

FEEDSTOCKS AND RESIDUAL FUEL OIL

ATBs and other ultra-low sulphur grades still have the potential to move into the 0.5pc sulphur fuel oil market for marine fuels blending, with robust shipping demand in place.

Low sulphur fuel oil (LSFO) values remained at May Brent +\$17.5/bl, fob Houston, amid similarly thin activity on Wednesday.

Demand for medium and high sulphur VGO appeared better defined, especially with the VGO market needing to fill the void for Russian high sulphur cargoes in the short run. But clear negotiations and transactions were not detected, leaving values unchanged.

The VGO market is also poised for the upcoming Brent roll, which could see differentials bumped up by the extent of the current backwardation.

May Brent crude rose by \$6.12/bl to \$121.6/bl on Wednesday, posting \$3.85/bl above the June Brent settlement at \$117.75/bl.

The May Brent to May Nymex WTI spread widened to \$6.67/bl with the latter WTI index settling at \$114.93/bl on the day.

Light cycle oil (LCO) differentials to the Gulf coast pipeline heating oil (GC PL HO) fell amid a narrowed distillate sulphur spread and persistently high distillate prices.

Cash prices for ultra-low sulphur diesel (ULSD) were up by 26.68¢/USG on the day while heating oil values rose by 25.06¢/USG. The ULSD premium to heating oil widened slightly to 28.75¢/USG from 27.125¢/USG on Tuesday, but the spread this week remains the narrowest since late January.

The Argus Renewable Volume Obligation (RVO) was assessed at 15.47¢/USG, up 0.19¢/USG from the prior session.

Naphtha

Prices for all naphtha grades were difficult to pin-point amid a volatile conventional gasoline and natural gasoline (C5) pricing basis.

Specific offers were scarce on Wednesday despite selling interest continuing to outpace demand for heavy, full-range and light naphthas.

Cash prices for the Gulf coast waterborne conventional 9 RVP (GC WB M2) gasoline were up 11.05¢/USG on the day while the April Nymex RBOB was up 3.2pc or 10.8¢/USG from the previous settlement.

Price discussions in the heavy and full-range N+A markets were effectively quelled by the basis volatility.

Heavy virgin naphtha (HVN) continued to be talked in the April Nymex RBOB -70s¢/USG for reformer end-use feedstocks.

Residual fuel oil

	Price	±
Waterborne* \$/t		
NYH 0.5% fuel oil delivered	950.17-956.90	+41.21
USG 0.5% fuel oil fob	935.02-938.38	+41.22
New York waterborne \$/bl		
0.3% low pour	162.11-162.60	+6.50
0.3% high pour	162.11-162.60	+6.50
0.5%	141.10-142.10	+6.12
1.0%	116.58-117.18	+5.36
3.0%	107.69-107.89	+4.61
Gulf coast waterborne \$/bl		
0.5%	138.85-139.35	+6.12
3.0%	99.23-99.53	+4.25
RMG	101.79-103.79	+4.61
0.5% vs Brent \$/bl		
NYH	19.50-20.50	0.00
USGC	17.25-17.75	0.00
0.5% vs WTI \$/bl		
NYH	29.11-30.11	+3.40
USGC	26.86-27.36	+3.40

*The \$/bl and \$/t assessments for 0.5% sulphur fuel oil prices in the New York and US Gulf are assessed independent of each other. They are not directly correlated by fixed conversion factors due to density variables.

Marine gasoil

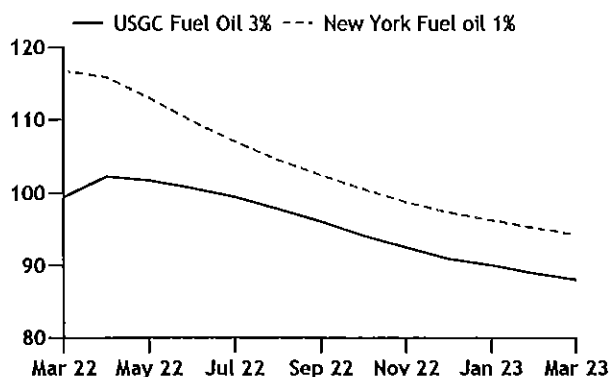
	Differential	Price	±
Apr			
New York 0.5%	-31.00/-30.00	380.48-381.48	+25.06

Bunker fuel

	Price	±
	380cst	
New York	740.00-745.00	+55.00
Philadelphia	775.00-780.00	+55.00
Houston	740.00-745.00	+20.00
Los Angeles	749.00-754.00	+35.00
Los Angeles 0.5%	923.00-927.00	+2.00
Seattle	752.50-757.50	+35.00

Residual fuel oil swaps

¢/USG



— Argus US Refined Products Forward Curves

FEEDSTOCKS AND RESIDUAL FUEL OIL

HVN with lower sulphur and octanes suitable for gasoline blending end-use remained offered in the April Nymex RBOB mid -60s¢/USG, but there were no bids in sight.

The only distinct offer reported on Wednesday was for a barge available in the outer period.

A 50,000 bl barge of 40 N+A naphtha with 64.5 API, 2ppm nitrogen, +30 color, 61 octanes and 75ppm sulphur was offered at May Nymex RBOB -73¢/USG for 25-27 April delivery to Houston.

The May Nymex RBOB settled 1.92¢/USG below the April RBOB on Wednesday.

The light naphtha market was also in limbo with consecutive day gains in the C5 basis. The March C5 was up 9¢/USG to 270¢/USG on Wednesday, exerting pressure on prompt light virgin naphtha (LVN) differentials.

Transactions for late March timing have been talked against the weaker April C5 basis. A barge of typical light sour naphtha out of Texas City changed hands at April C5 +1¢/USG for 30-31 March.

Other light naphtha offers for generic sour specifications were noted around April C5 +4¢/USG, but there were no bids. This offer level would be the equivalent of around March C5 -6¢/USG early Wednesday.

Offers for generic light sour naphtha started out at March C5 -3.5¢/USG, but selling interest faded as bids failed to materialize.

Fuel oil

Bullish crude sentiment bolstered North American fuel oil prices on Wednesday as trading interest dissipated with crude volatility.

Residual fuel oil interest failed to emerge in the US Gulf coast on Wednesday as no bids, offers or trades firmed on either low or high-sulphur grades.

The Houston 0.5pc low-sulphur fuel oil (LSFO) trading window was thinly participated with no visible interest to this end.

Sluggish retail and wholesale demand defined the US Gulf coast market on Wednesday, yielding no fresh discussions on LSFO barge cash differentials to May ICE Brent crude. LSFO barge prices were preserved at May Brent +\$17.5/bl for a 20 API material, fob Houston, in market talks.

Selling indications surfaced on LSFO barges offered at a mid to high \$17s/bl premium to May ICE Brent for a 20 API

Paria posted prices, Trinidad

	23 Mar	21 Mar	17 Mar	16 Mar	15 Mar
Gasoline 95r ¢/USG	375.00	370.00	350.00	329.00	325.00
Gasoline 92r ¢/USG	370.00	365.00	345.00	324.00	320.00
Jet/Kerosine ¢/USG	405.00	380.00	352.00	320.00	305.00
Gasoil 0.1%S ¢/USG	410.00	390.00	363.00	328.00	312.00
Fuel oil \$/bl	110.00	100.00	95.00	100.00	105.00

gravity, but this price was not matched by specific deals or negotiations.

LSFO blending component trading was also diminished on the day. No slurry oil barges changed hands, as a prominent Texas seller retreated to the sidelines amid tight supplies.

Steep LSFO backwardation contributed to muted demand, with buyers waiting for spreads to ease and crude volatility to subside.

Ships otherwise moved steady in Gulf coast ports, with minimal backlogs at docks, hinting buyers may be well supplied on barrels.

HSFO barges also lacked fresh interest. No bids, offers or deals came to light on the heavy grade, met by limited market participation.

HSFO spot prices were deemed as high as a \$2/bl premium to a publication-based price recorded at \$101.79/bl for 45,000bl barges, fob Houston.

Concerns facing subdued Russian heavy grade fuel oil imports continued to circulate in market discussions, as Russia accounted for more than 60pc of Gulf coast imports in the last 12 months. Middle Eastern HSFO was reportedly available for import into the Gulf, but specific prices or cargo flows were not revealed.

The US Gulf coast LSFO premium to HSFO widened from \$34.8/bl to \$36.3/bl on Wednesday.

Trading interest stagnated in the New York harbor (NYH) fuel oil market Wednesday as no finished business was heard on any sulphur grade.

A climb in No.2 heating grade fuel oil up to \$171-172/bl helped to support prices for both very-low sulphur grades of 0.3pc and 0.5pc sulphur. Both products can be utilized in the blending and production of the heating oil.

Low-pour and high-pour 0.3pc sulphur fuel oil were both assessed up by almost \$6.5/bl to \$162.36/bl alongside gains in the heating grade.

FEEDSTOCKS AND RESIDUAL FUEL OIL

LSFO barge cash differentials for a 0.5pc sulphur maintained high spreads to May ICE Brent crude at a \$20/bl premium for a 20 API gravity material on a delivered basis amid bullish sentiment on No.2 oil.

Local participants noted NYH suppliers were cautionary to sell physical fuel oil due to current supply uncertainty.

NYH 1pc sulphur fuel oil prices trended up with gains in front-month swaps, while 3pc sulphur fuel oil values preserved a \$5/bl premium over US Gulf coast HSFO.

Marine fuels

North American bunker prices spiked on Wednesday, tracing higher Brent crude levels. Demand increased compared with earlier this week, as buyers finalized deals despite rising prices.

At the port of Galveston, Texas, 500t of marine gasoil (MGO) sold at \$1,487/t delivered for 27 March. Two ex-wharf deals were heard at competing Corpus Christi, Texas. The first was 250t of very low-sulphur fuel oil (VLSFO) sold at \$986/t. The other was 400t of VLSFO at \$998/t with 170t of MGO at \$1,366/t.

There were three ex-wharf bunker deals reported in New

Orleans. The first was 1,000t of high-sulphur fuel oil (HSFO) at \$890/t. Next, 750t of VLSFO sold at \$1,050/t. The third deal was for 200t of MGO at \$1,450/t. Indications for HSFO, VLSFO and MGO were heard cheaper at \$835/t, \$1,035/t and \$1,375/t, respectively. No deals were reported at any of those prices.

The price of methanol barges in the US Gulf coast was at a \$15/t premium to VLSFO in Houston, or 2pc higher than VLSFO. By comparison, LNG for export out of the US Gulf was assessed at a \$352/t premium to VLSFO in Houston, or 38pc higher than VLSFO. Methanol and LNG are considered by the bunkering industry as alternative, low-carbon fuel options.

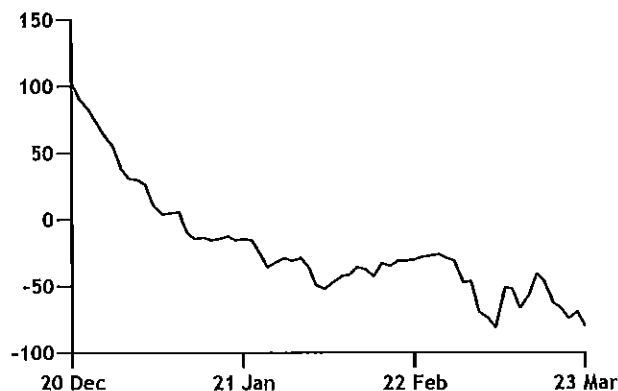
The New Orleans to Houston VLSFO premium reached \$100/t on Wednesday. Price assessments at both ports increased, but New Orleans outgained Houston, which widened that differential.

A clip of 100t of MGO sold ex-wharf at \$1,260/t in Philadelphia.

North American west coast bunker demand remained soft. Higher prices throughout the region kept buyers away. The Los Angeles to Singapore VLSFO premium dropped to \$45/t. Prices at both ports gained, but Singapore outpaced Los Angeles, which tightened that spread.

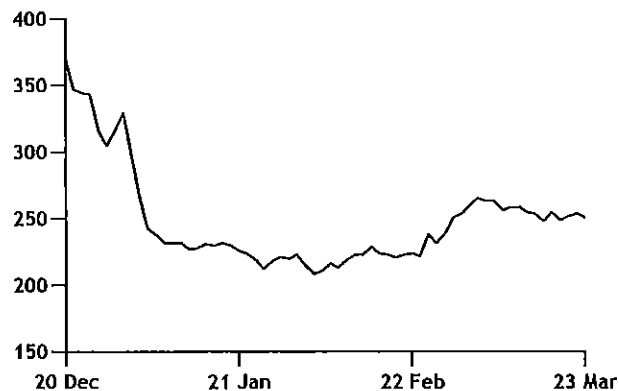
Gulf coast ethanol vs Colonial RBOB

¢/USG



New York ethanol

¢/USG



INFRASTRUCTURE NEWS

Limetree restart may require permit: EPA

New owners of the shuttered Limetree Bay refinery in the US Virgin Islands will need to provide US environmental regulators with additional information on operations and equipment before a potential restart, after an ill-fated reboot led the facility into bankruptcy last year.

The 200,000 b/d Limetree refinery on St Croix was purchased by West Indies Petroleum Limited (WIPL) and Port Hamilton Refining and Transportation (PHRT) in January as part of bankruptcy proceedings launched after a May 2021 shutdown. But the new owners' plans to restart the refinery have now drawn the attention of the US Environmental Protection Agency, which yesterday sent a letter to the companies suggesting that the agency could require a key permit for the facility before units are reactivated.

The EPA sees "strong indicators to suggest" that the moth-balled refinery will need to obtain a prevention of significant deterioration (PSD) permit prior to a restart, according to a statement published yesterday.

The EPA has sent a letter asking WIPL and PHRT a series of questions about the facility and may require the PSD permit "given the concerning incidents at this facility that previously endangered the health of the people who live and work in surrounding communities," the agency said.

PSD permits are intended to control certain pollutant emis-

sions that could arise from new facilities or from modifications at existing facilities. Implemented under the Clean Air Act and issued by state and local authorities, the permits can require facilities to install best available air pollution control technology and to perform air quality impact analyses.

The Limetree Bay refinery was once a 525,000 b/d operation owned by a joint venture between Venezuela's PdV and US independent Hess but shrunk to a 350,000 b/d output by the time of its closure in 2012, when the firms opted to close the plant amid heavy losses.

The facility restarted in January 2021 following a years-long hiatus and several delays, but was issued a shutdown order by the EPA on 14 May 2021 after an accident cast an oily mist over areas west of the refinery. The incident was one of several chemical releases cited as grounds in a lawsuit filed by St Croix residents against the refinery in May of last year, before the facility entered bankruptcy two months later.

The EPA did not respond to a request for comment on what information it is seeking from WIPL and PHRT.

WIPL and PHRT in January closed a deal to purchase the refinery after winning a bankruptcy auction with a \$62mn bid. The companies hope to restart the refinery and more than double processing capacity to 450,000 b/d.

By Dylan Chase

INDUSTRY NEWS

US gasoline, diesel and jet stocks fall: EIA

US liquid fuel stocks fell in the week ending 18 March, amid a steep rise in gasoline exports and a jump in domestic demand for diesel and jet fuel.

US gasoline stocks dropped by 1.2pc to 238mn bl on the week, according to the US Energy Information Administration (EIA). That marked a seventh consecutive weekly decline and brought stocks to their lowest levels since the last week of December 2021.

Gasoline inventory draws were spurred by a 35.6pc weekly rise in exports to 1.058mn b/d, the highest level recorded since the week ending 7 December 2018, reflecting increased export demand amid the Russia-Ukraine conflict. Implied domestic demand for gasoline fell by 3.4pc to 8.637mn b/d.

Diesel stocks fell by 1.8pc to 112.1mn bl, marking the low-

est inventory levels recorded since the week ending 11 April 2014. The drawdown was spurred by a 21.9pc rise in implied US demand to 4.516mn b/d. Diesel exports fell by 34.2pc to 931,000 b/d from the week prior.

Jet fuel inventories dropped by 6.2pc to 36.4mn bl, the lowest level recorded since the week ending 14 January. Implied US jet demand rose by 20.1pc to 1.737mn b/d. Jet exports dropped by 24pc to 98,000 b/d on the week.

US refiner inputs rose by 0.7pc to 16.280mn b/d, the highest level since the week ending 31 December 2021. Utilization rates averaged 91pc on the week, up by 1.1pc from the prior week and also marking the highest level recorded since 27 August 2021.

By Dylan Chase

INDUSTRY NEWS

US jet fuel demand climbs to 7-month high

US jet fuel inventories fell to nine-week lows last week as spring break travel demand lifted jet fuel consumption to the highest since August.

Jet stocks declined by 6.2pc to 36.4mn bl, the lowest since early January and down by 7.1pc from a year earlier, according to US Energy Information Administration (EIA) data.

US jet fuel products supplied – a proxy for demand – rose by 20.1pc to 1.7mn b/d, the highest level since August 2021. This came as rising spring break travel coupled with a decline in new Covid-19 cases to lift demand. The running four-week average of jet fuel demand increased by 2.6pc to 1.5mn b/d, the highest four-week stretch since November.

Inventories also fell as US refiners cut jet production by 1.2pc to 1.35mn b/d, the lowest since early November. Output was down across all regions last week, save for the US west coast, which saw jet fuel production increase by nearly 7pc to 324,000 b/d. Inventories at the west coast shrank to 9mn bl, down 1.2mn bl as imports into the region dropped to 22,000 b/d from 91,000 b/d.

The drop in west coast imports prompted total US jet fuel imports to shed 6.7pc to 139,000, a four-week low. This came even as Atlantic coast imports more than doubled to 115,000 b/d from 57,000 b/d the prior week, EIA estimates show.

US jet fuel exports declined by 24pc to 98,000 b/d last week, the lowest in four weeks.

By Jared Ainsworth

US energy activity picked up in 1Q: Fed

Activity in the US oil and gas sector accelerated in the first quarter, according to the Dallas Fed, even as costs increased.

The business activity index – the broadest measure of conditions in the Dallas Fed Energy Survey – rose to an all-time high of 56 from 42.6 in the final three months of 2021.

Executives at oil and exploration companies flagged higher production in their responses to the quarterly survey of 141 energy companies in Texas, southern New Mexico and northern Louisiana that was carried out between 9-17 March. Meanwhile, costs jumped for the fifth straight quarter and labor market indexes hit record highs.

The industry has been engaged in a war of words with the US administration as the conflict in Ukraine has triggered fears of a global supply crisis and sent oil prices soaring above \$100/bl. So far, most producers have ignored calls to ramp up output beyond their original plans for 2022, and lashed out at the

White House for favoring pro-climate policies at their expense.

Almost 60pc of respondents cited investor calls for restraint as the main factor behind an unwillingness to boost output. Other reasons included shortages of labor and equipment.

"Even if funding were available and supply-chain issues were resolved, it is unlikely that the labor shortage will be resolved any time soon and simply by paying higher wages," said one executive.

While 41pc of respondents said an oil price of between \$80/bl and \$99/bl is required for publicly-traded companies to grow again, about a fifth said crude needed to be trading at \$100/bl to \$119/bl for this to happen. Around a third said any potential return to growth does not depend on the price of oil. The US benchmark traded near \$115/bl in New York today.

"U.S. government actions and intentions are not helping U.S. producers to increase domestic oil and gas supplies appreciably," commented one executive from an E&P company.

The six-month outlook index increased to a record high of 76.3 from 53.2 in the previous quarter. The outlook uncertainty index also jumped from -1.5 to 31.9.

Those polled expect West Texas Intermediate to average \$93/bl by the end of 2022, with responses ranging from \$50-200/bl, and a Henry Hub natural gas price of \$4.57/mmBTU. WTI spot prices averaged \$103.07/bl during the survey period and Henry Hub prices averaged \$4.65/mmBtu.

By Stephen Cunningham

US states slash fuel taxes after prices spike

California is considering a proposal to give residents a refund of \$400 per vehicle in response to record-high fuel prices, while Maryland and Georgia last week temporarily suspended state taxes on fuel purchased in those states.

California governor Gavin Newsom (D) today unveiled more details on a proposed \$11bn fuel price relief package, which would need support from the state's Democratic-controlled legislature to be signed into law. Out of the plan, \$9bn would go to residents in debit cards with \$400 for each registered vehicle, up to two vehicles, with payments starting as soon as July.

"That direct relief will address the issue that we all are struggling to address, and that is the issue of gas prices," Newsom said.

Governors across the US have started tapping surplus state funds to provide drivers relief from gasoline prices that

INDUSTRY NEWS

for regular grade hit a record national weekly high of \$4.32/USG earlier this month, according to data from the US Energy Information Administration (EIA). Fuel prices have surged in response to the Russia-Ukraine conflict and corresponding sanctions.

Maryland governor Larry Hogan (R) signed emergency legislation on 18 March that will suspend for 30 days the state's 36.1¢/USG tax on gasoline and 36.9¢/USG tax on diesel. Georgia governor Brian Kemp (R) the same day suspended his state's 29.1¢/USG tax on gasoline and 32.6¢/USG tax on diesel through 31 May.

For the California relief package, it would include up to \$600mn to pause part of the state's sales taxes on diesel for a year and \$523mn to pause inflationary increases to state taxes on gasoline and diesel. It would also have \$750mn in grants for public transit agencies to offer three months of free public transit. Californians paid \$5.71/USG for regular grade gasoline in the week ending 21 March, according to EIA data.

Some Democratic lawmakers in the US Congress have proposed suspending the federal 18.4¢/USG tax on gasoline for the rest of the year. But critics say lifting fuel taxes will eat into needed funding for road work and stimulate the economy at a time when inflation is already at 40-year highs. Much of the benefits of a fuel tax holiday will flow to oil producers in the form of higher prices from higher demand, non-profit group Committee for a Responsible Federal Budget president Maya MacGuineas said last month.

By Chris Knight

Warm weather weighs on Tulsa ULSK prices

Ultra-low sulphur kerosene (ULSK) prices in the southern portion of the US midcontinent fell today to the narrowest premium to diesel in 10 years amid forecasts for warmer tem-

peratures.

Prompt ULSK prices at the Magellan Pipeline in Tulsa, Oklahoma, fell to a 2.5¢/USG premium to ultra-low sulphur diesel (ULSD), marking the narrowest spread since March 2012 and well below the 18.65¢/USG premium it had held from early February through yesterday.

ULSK demand is often buoyed by colder weather, and the National Weather Service forecasts temperatures to rise above normal levels throughout Oklahoma and across wide swaths of the midcontinent during the next 6-10 days. The probability of above-normal temperatures is 60-70pc in western Oklahoma, as well as parts of Texas and Kansas, according to the forecasts.

Bids to purchase Tulsa ULSK emerged today at 15¢/USG below the April Nymex ULSD contract, while offers to sell ULSK fell to 8¢/USG below the Nymex. This saw prices fetch an 11.5¢/USG discount to the Nymex, the lowest since February 2015 and more than 23¢/USG below the 11.75¢/USG premium ULSK prices notched during the same session last year.

Elsewhere in the midcontinent, Chicago ULSK prices

Argus Assessment Rationale Database

For prices used in financial benchmarks, Argus publishes daily explanations of the assessment rationale with supporting data. This information is available to permissioned subscribers and other stakeholders.

Subscribers to this report via Argus Direct or MyArgus may access the database here.

Other subscribers may request access here or contact us by email at sales@argusmedia.com.

ANNOUNCEMENT

Argus successfully completes annual Iosco assurance review

Argus has completed the ninth external assurance review of its price benchmarks covering crude oil, products, LPG, petrochemicals, biofuels, thermal coal, coking coal, iron ore, steel, natural gas and biomass benchmarks. The review was carried out by professional services firm PwC. Annual independent, external reviews of oil benchmarks are required by international regulatory group Iosco's Principles for Oil Price Reporting Agencies, and Iosco encourages extension of the reviews to non-oil benchmarks. For more information and to download the review visit our website <https://www.argusmedia.com/en/about-us/governance-compliance>

INDUSTRY NEWS

tracked West Shore/Badger pipeline diesel prices lower by 1¢/USG to 4.5¢/USG below the Nymex. Unlike forecasts for the southern and western portions of the midcontinent, the National Weather Service expects temperatures to remain below normal levels near Chicago in the coming 6-10 days.

By Jared Ainsworth

Alaska crude output falls as USWC runs rise

Alaskan North Slope (ANS) crude production fell for a fifth consecutive week last week amid international demand for the grade, while US west coast refinery runs trended higher.

Alaskan oil output fell by nearly 4,000 b/d to 481,000 b/d in the week ended 18 March from the week prior, according to the Alaska Department of Revenue (ADR), down by nearly 6pc from early February.

The Suezmax *Sabine* is laden with a cargo of ANS since 11 March, marking the first export of the grade this year if it discharges as expected at Rizhao-Lanshen, China, in early April, according to vessel tracking data.

At least nine cargoes, or nearly 24,000 b/d of the domestic-medium sour, were loaded for export to Japan, China, Singapore or South Korea in 2021, compared with 13 cargoes, or nearly 43,000 b/d, loaded for delivery to similar destinations in 2020, according to the US Census Bureau and an analysis of vessel tracking data.

At the US west coast, refinery runs rose for a third consecutive week, by 109,000 b/d to 2.2mn b/d last week from the week prior, according to the latest statistics from the US Energy Information Administration (EIA). That is up by 10pc from the end of February.

PBF Energy began a planned flaring event at its 155,000 b/d refinery in Torrance, California, on 19 March, which could pressure US west coast crude demand this week.

US west coast crude inventories rose by 1.9mn bl to 51.1mn bl last week from the week prior.

ANS for delivery to the US west coast in May has so far sold at premiums to CMA Ice Brent between \$2.65/bl and \$3.30/bl since the start of the prompt month trade cycle on 1 March.

By Benjamin Peyton

California gasoline sales rose in December

California gasoline sales rose in December, but not by enough to lift fourth quarter demand from the second lowest in at least two decades.

California gasoline sales in December averaged about 892,000 b/d, up by 1.8pc from November and 13pc higher than a coronavirus-reduced December 2020, according to state fuel tax data.

Still, demand was the second lowest for any December in more than 20 years of state data.

Fourth quarter state gasoline sales were down by 7pc compared to the same period in 2019, extending the pandemic-induced demand slump for Low Carbon Fuel Standard (LCFS) credits generated to offset the carbon intensity of CARBOB gasoline. Rising supplies of low-carbon fuels and sagging demand for gasoline, which generates nearly 80pc of LCFS deficits, have helped to reduce credit prices to the lowest levels in four years.

Full-year gasoline sales also were the second-lowest on record, averaging about 900,000 b/d, an 11pc increase from 2020 but down by 10pc from 2019.

But December sales, at 6.1pc below December 2019, marked the closest month to pre-pandemic gasoline demand in year-over-year comparison since efforts to contain the spread of Covid-19 began in early 2020.

Sales of diesel, including biodiesel and renewable diesel, reached the highest December and fourth quarter sales volumes since 2017. The state reported about 231,000 b/d of diesel demand for the month, a 28pc increase from November and 9pc higher than December 2019.

Renewable diesel generated 31pc of all new LCFS credits in the third quarter, the most recent period with available data. LCFS credit data for the fourth quarter will be released at the end of April.

By Elliott Blackburn

US Senate bill targets ocean carriers' fees

A Senate committee yesterday unanimously approved a bill that would require ocean carriers to justify charging shippers special fees when handling cargo at US ports.

Responding to complaints US shippers are being charged inordinate fees by foreign carriers, the Senate Commerce, Science and Transportation Committee by voice vote passed a measure that would strengthen the powers of the Federal Maritime Commission to determine if an ocean carrier's fees are reasonable.

US exporters "have been slapped with fees, have not been able to export goods because empty containers are going back,"

INDUSTRY NEWS

the bill's lead sponsor, senator Amy Klobuchar (D-Minnesota), said. "We want to be a country that makes stuff, invents stuff and exports to the world."

Known as the Ocean Shipping Reform Act, the bill would flip the burden of proof so that a carrier would have to demonstrate why a demurrage or detention charge was reasonable. Today, a shipper must show why a charged fee was unreasonable.

Demurrage is a charge the vessel owner assesses a shipper when a cargo has not been loaded or unloaded and removed from the terminal area in a timely fashion. Detention is a fee assessed when a shipper fails to return an empty container within a specified period of time.

The bill also would prohibit ocean carriers from unreasonably declining to accept US cargo. "This is the top ask of the American exporters whose products have been left on the docks," committee chair Maria Cantwell (D-Washington) said. The legislation would bar carriers or marine terminal operators from retaliating against shippers that may patronize a competitor by refusing to load cargo when space is available.

With 27 co-sponsors and broad, bipartisan support, the bill appears poised for easy passage on the Senate floor. The US House of Representatives approved a companion measure on 8 December by a 364-60 vote.

Shipping line industry group the World Shipping Council argued that "neither chamber's version of the bill does anything to fix the landslide logistics breakdowns that are at the heart of America's supply chain problems. In fact, the House bill would make existing congestion worse."

But the Senate bill "provides regulators enough authority to get the final rules right," the council said.

The committee, again by voice vote, approved a second bill that would empower the commission to declare an emergency to help relieve port congestion.

Sponsored by the committee's ranking Republican, Roger Wicker (Mississippi), the Freight Act would enable the commission to require carriers and marine terminal operators to notify shippers, railroads and trucking companies about cargo throughput and availability.

The committee rejected proposals by senator Ted Cruz (R-Texas) to bar the Transportation Department from prohibiting the transportation of LNG by rail and to waive Jones Act requirement for LNG shipments. The Jones Act requires that shipments from one US port to another be conducted on ves-

sels built and flagged in the US.

By David Ivanovich

US ethanol stocks at highest since April 2020

Ethanol inventories in the US moved up for a third straight week and reached their highest since the early stages of the Covid-19 pandemic, according to data from the Energy Information Administration (EIA).

Domestic ethanol inventories for the week ended 18 March were reported at 26.15mn bl, up from the week before by 0.8pc. The last time stocks were higher was the week ended 24 April 2020 amid government lockdown orders meant to curb the initial spread of the Covid-19 virus.

Gulf coast inventories rose the most, increasing by 6pc to 5mn bl. Draws in the midcontinent and Rocky Mountains regions tempered total US stock gains. Year on year, total ethanol supplies were higher by 20pc. Compared with the same week of 2020, domestic stocks were higher by 8.3pc.

US ethanol production increased by 1.6pc to 1.04mn b/d on the week, reaching a nine-week high. Output was flat to higher everywhere except for the Gulf coast where it fell by 8.7pc to 21,000 b/d. Latest production levels were 13pc higher compared with the corresponding week of 2021 and 3.7pc higher compared with the same week two years ago.

Implied gasoline demand was last at 8.6mn b/d, down from

EIA ethanol production and stocks

	18 March	Week ago	Change	Year ago	Change
Average weekly US ethanol production, '000 b/d	1,042	1,026	16	922	120
East coast (PADD 1)	11	11	0	12	-1
Midcontinent (PADD 2)	988	971	17	876	112
Gulf coast (PADD 3)	21	23	-2	14	7
Rocky Mountains (PADD 4)	13	13	0	10	3
West coast (PADD 5)	9	9	0	9	0
Ending US ethanol stocks, '000 bl	26,148	25,945	203	21,809	4,339
East coast (PADD 1)	7,962	7,852	110	7,546	416
Midcontinent (PADD 2)	10,178	10,427	-249	7,360	2,818
Gulf coast (PADD 3)	4,999	4,714	285	4,531	468
Rocky Mountains (PADD 4)	357	362	-5	339	18
West coast (PADD 5)	2,652	2,590	62	2,033	619

— EIA

INDUSTRY NEWS

the prior week by 3.4pc. Year on year, demand was slightly higher by 0.2pc. The latest demand levels were 2.3pc lower than the same week two years earlier.

Ethanol blending fell by 3.6pc to 865,000 b/d, in tandem with the lower gasoline demand. Blending was 3.1pc higher on the year and 1pc lower than the same week in 2020.

By Thom Dwyer

Mexico's smuggled fuel rose 14pc last year

Smugglers trying to avoid taxes brought 102mn bl (280,000 b/d) of gasoline and diesel into Mexico during 2021, up by 14pc from 2020, according to estimates from the government's tax authority (SAT).

The volume represents 27pc of legitimate sales of gasoline and diesel in Mexico and 41pc of imports, the entity said in its fourth quarter tax and management report.

Mexico's total legal fuel sales in 2021 added up to 375.7mn bl (1mn b/d), of which legal imports were 250.5mn bl (686,300 b/d), and the rest was domestic production of 125.2mn bl (343,000 b/d). But the energy ministry estimated that Mexico would consume 477.7mn bl of fuel in 2021, a 102mn bl difference, which the SAT believes was mostly filled by smuggled fuel.

Since 2012, legal sales of fuels have lagged far behind estimates based on economic and population growth, SAT said.

Smuggled gasoline and diesel volumes have grown by 123pc from the 45.8mn bl (125,500 b/d) of fuels that entered the country in 2018, the last year of the former administration.

Volumes enter illegally mainly through Mexico's northern border from the US labeled as oils and lubricants that do not pay the fuel excise tax (IEPS).

Imports of basic lubricants have grown significantly to 69,000 b/d on December 2021, up from 39,000 b/d in January 2020, "a growth that has no economic support," the SAT said.

The administration has focused on cutting outright theft of fuels from trucks and pipelines, which Pemex said still stood at 1.3mn bl (3,600 b/d) in 2021, but tax evasion has grown as a problem.

The government added security at ports and border crossings to try to cut into evasion, including giving control of the ports to the marines. The administration has also cancelled existing fuel import permits of many companies and implemented stricter import rules, arguing the measures are needed to control evasion.

Total tax revenue from the excise tax for fuels fell by 26pc to Ps223bn (\$11bn) in 2021 from 2020 — although this was also affected by higher amounts of deductions to offset the final price for consumers, according to the report.

The largest drop in collected fuel taxes initially came in maritime ports, but more smuggling is now happening at border points on fuels moved by truck and rail, SAT said.

By Sergio Meana

Brazil retailers prioritize branded stations

Brazilian fuel distributors are revising fuel procurement strategies to prioritize supply for their own networks, a change motivated by the need to guarantee supply to branded retail stations amid waterborne product scarcity on the international market.

The growing risk of a fuel supply shortfall as of April has propelled global demand for cargoes of gasoline and diesel and pushed acquisition prices to levels considered unthinkable just a few weeks ago. Last week, Brazilian distributors imported two full cargoes of gasoline and three diesel cargoes, according to an Argus tally, more than twice the weekly norm.

Heated demand is tracking a wider spread to Nymex futures contracts. The rise in differentials was particularly abrupt in the case of diesel, with negotiations concluded at record premiums for both imports of dap cargo and ex-port land terminal product marketed at ports. On 11 March, the premium for diesel imports to ports in the south and southeast reached 36.5¢/USG above May Nymex while the difference between values for ex-port land terminal diesel and prices practiced at the Paulinia refinery in Sao Paulo and the Araucaria refinery in Parana surpassed the R2,000/m³ (156¢/USG) mark.

Local traders are already warning that retail consumers may face a product shortfall. The risk is prompting large distributors such as Vibra, Ipiranga and Raizen, which are also the country's largest importers, to consider options to first ensure supply for their branded retail networks, including cutting flows to unfranchised buyers such as independent wholesalers at the retail level, according to market participants. Known locally as TRRs, these companies focus on selling diesel to large consumers and clients such as in the agricultural, transport and industrial sectors.

Shortages, risks and hurdles

The second half of March saw a dramatic increase in demand for foreign diesel after state-controlled Petrobras

INDUSTRY NEWS

announced it would reduce volumes available for supply in April. The flow of foreign fuel products into Brazil had slowed since the start of the year even with an expected increase in demand. The market expectation is that supply of both fuels will remain restricted until at least mid-April.

The search for fuel, especially diesel, has Brazilian buyers looking beyond the US Gulf Coast, the dominant source of fuel imported into Brazil. In the case of gasoline, the US is the leader among a pool of suppliers capable of easily supplying Brazil with its light and low-octane gasoline specification. But US Gulf coast blenders and refiners were particularly sought after as demand from Europe remained intense to cover gaps left by lower Russian fuel availability.

The constant rise in oil and fuel prices on international markets, a reaction to the Russia-Ukraine conflict, should keep differentials for imported diesel and gasoline elevated. In the last two weeks, buyers largely accepted the financial losses incurred by the closed arbitrage window, focusing on avoiding a worst case scenario of a widespread supply shortage. The main concern now is how long will participants be able to maintain operations under current business conditions characterized by high volatility and uncertainty.

Importers are also dealing with difficult access to credit lines from banks, higher sea freight costs and higher insurance premiums, all a reflection of an increased risk perception surrounding operations involving commodity trading against a backdrop of the Russia-Ukraine conflict.

By Amance Boutin and Gabrielle Moreira

Revenue outweighs volumes for Brazil's Vibra

Brazilian fuel retailer Vibra Energia (formerly BR Distribuidora) posted a 61pc increase in fourth quarter revenue over a year earlier, as higher products prices offset lower volumes.

Fuel sales reached 9.9bn l in the last three months of 2021, a 3pc drop compared with 10.3bn l in the same quarter in 2020. Net sales were up at R39.3bn (\$8bn) from R24.3bn on an annual basis.

In terms of volumes, lower sales of petroleum coke and ethanol were partially offset by higher sales of aviation fuel and fuel oil.

Diesel sales added 4.4bn l in the last quarter, up by 5pc from a year earlier. Gasoline sales came in at 2.7bn l, up by 7pc compared with the prior year. The domestic motor fuels market has already returned to levels before Covid-19. But

ethanol volumes dropped by 38pc to 610mn l, reducing the biofuel's share in the company fuel sales mix.

Aviation fuel sales rose by 31pc to 958mn l from the same period last year, following the rebound in domestic flights. Petroleum coke sales dropped by 84pc to 131mn l compared with the prior year, due to the end of Petrobras contract.

Pricing

Vibra says that since October it has seen a significant recovery in sales volumes driven by the relative return of mobility amid the cooling of pandemic effects. At the same time, Vibra resorted to more expensive imported fuel to meet demand, as domestic volumes in Petrobras refineries were sold with prices below international market-based parity.

Looking ahead, the company sees uncertainties due to the conflict between Russia and Ukraine, resulting in a steep increase in fuel prices. "The higher fuel prices can still curb consumption, limiting the trajectory recovery now in progress," Vibra said.

At the end of last year, higher product prices favored gains generated by inventories. "The fourth quarter of 2021 was also marked by the rise in the price of the commodities we trade, which ended up producing the usual positive effect of inventory on the sector's margins," Vibras said.

Efficiency

Vibra's quarterly results benefited not only from the favorable pricing environment but also from the cost and expense efficiencies achieved during the past years, according to analysts.

Vibra went through a process of cost-cutting since its privatization in 2019 and is a lot leaner than it was in the past. The company closed last year with 179 new service stations from 2020 levels, reaching 8,201 units.

By Conrado Mazzoni

Brazil extends ICMS tax freeze

Brazil state governors decided to extend the freeze of the VAT-like ICMS tax on gasoline, ethanol and LPG for another 90 days.

The decision could reduce state tax revenues by half this year, Piauí state Governor Wellington Dias said after a meeting with his counterparts yesterday in Brasília.

A group of state governors is currently discussing changing the tax regime to a single ICMS levy and a new formula, which should be ready by tomorrow, according to Dias. The ICMS tax

INDUSTRY NEWS

is currently levied on several stages of the supply chain.

President Jair Bolsonaro recently turned into law the single levy, which will initially be applied to diesel.

The governors favor a fuel aid and a stabilization fund to mitigate the impact of fuel price hikes, Dias said.

By Gabrielle Moreira

PetroEcuador gets 3 offers for diesel supply

Glencore, Trafigura and Puma Energy bid to supply state-owned PetroEcuador's with 1.96mn bl of diesel.

Glencore offered a bid at a \$7.45/bl premium over Colonial Pipeline ultra-low sulphur diesel at the US Gulf coast. Trafigura

presented a bid at a \$16.82/bl premium and Puma a \$18.88/bl premium bid.

PetroEcuador had invited 38 companies to participate, but only three presented offers.

The supply will be delivered in seven cargoes of 280,000 bl each +/-2pc between April-June 2022 to the Esmeraldas, La Libertad, Punta Arenas or Tres Bocas terminals.

The first cargo will be received in the 14-16 April window. The tender is expected to be formally awarded in the following 48 hours.

By Alberto Araujo

ANNOUNCEMENTS

Spring 2022 USMC RVP shift updated

The following is a collection of upcoming RVP transitions slated for the US midcontinent markets.

Chicago gasoline market:

- Beginning on 7 March, with the start of prompt assessments for C2 March, Buckeye Complex (BCX) regular CBOB (PA0018535) and BCX 91 conventional gasoline (PA0024865) will transition to 8.8 RVP.
- Beginning on 7 March, with the start of prompt assessments for C2 March, BCX regular RBOB (PA0023268) and premium RBOB (PA0028413) will transition to 7.4 RVP.
- Beginning on 15 March, with the start of prompt assessments for C3 March, West Shore/Badger pipeline regular CBOB (PA0006535), West Shore/Badger 87 conventional gasoline (PA0002897), West Shore/Badger 91 conventional gasoline (PA0002898), Wolverine Pipeline regular CBOB (PA0023270), and Wolverine 91 conventional gasoline (PA0024865) will transition to 9.0 RVP.
- Beginning on 15 March, with the start of prompt assessments for C3 March, West Shore/Badger regular RBOB (PA0002899) and West Shore/Badger premium RBOB (PA0007693) will transition to 7.4 RVP.
- Beginning on 25 March, with the start of prompt assessments for C1 May, BCX regular CBOB (PA0018535) and BCX 91

conventional gasoline (PA0024865) will transition to 9.0 RVP.

Group Three gasoline market:

- Effective 1 March: Argus' assessments for Group Three any month sub-octane V grade (PA0012677), Group Three prompt sub-octane V grade (PA0012676), and Group Three 91 conventional gasoline A grade (PA0003915) will transition to 8.5 RVP.
- Effective 2 May: Argus' assessments for Group Three any month sub-octane V grade (PA0012677), Group Three prompt sub-octane V grade (PA0012676), and Group Three 91 conventional gasoline A grade (PA0003915) will transition to 9.0 RVP.

Please contact David Ruisard at 713-429-6306 or david.ruisard@argusmedia.com or Jared Ainsworth at 713-429-6303 or jared.ainsworth@argusmedia.com with any questions or comments.

USWC RVP shifts for spring 2022

The following are a collection of upcoming US west coast gasoline RVP shifts.

Effective 18 February:

- Assessments for SF regular CARBOB (PA0002345) and SF PREM CARBOB (PA0002347) will be for 5.99 RVP

Effective 22 February:

- Argus assessments for LA Sub-octane gasoline (PA0008487) will be for 10 RVP

ANNOUNCEMENTS

Effective 1 March:

- Argus assessments for PNW sub-octane gasoline (PA00002348) will be for 9 RVP

Please contact Craig Ross and craig.ross@argusmedia.com with any questions or comments.

USGC spring 2022 RVP schedule

The following is a collection of upcoming US Gulf coast gasoline RVP shifts:

Effective 28 February with the start of prompt trading for cycle 14:

- Argus assessments for regular CBOB (A grade - PA0013298) in the Gulf coast will be for 11.5 RVP regular CBOB (A3).
- Argus' assessment for premium CBOB (D grade - PA0013299) in the Gulf coast will be for 11.5 RVP premium CBOB (D3).
- Argus' assessment for 87 conventional (M grade - PA0013296) in the Gulf coast will be for 11.5 RVP 87 conventional (M3).
- Argus assessments for 93 conventional (V grade - PA0013297) in the Gulf coast will be for 11.5 RVP 93 conventional (V3).
- Argus' assessments for regular RBOB (F grade - PA0003993) in the Gulf coast will be for 11.5 RVP regular RBOB (F3).
- Argus' assessments for premium RBOB (H grade - PA0003994) in the Gulf coast will be for 11.5 RVP premium RBOB (H3).

Effective 10 March with the start of prompt trading for cycle 16:

- Argus assessments for regular CBOB (A grade - PA0013298) in the Gulf coast will be for 9.0 RVP regular CBOB (A2).
- Argus' assessment for premium CBOB (D grade - PA0013299) in the Gulf coast will be for 9.0 RVP premium CBOB (D2).
- Argus' assessment for 87 conventional (M grade - PA0013296) in the Gulf coast will be for 9.0 RVP 87 conventional (M2).

- Argus assessments for 93 conventional (V grade - PA0013297) in the Gulf coast will be for 9.0 RVP 93 conventional (V2).

- Argus' assessments for regular RBOB (F grade - PA0003993) in the Gulf coast will be for 7.4 RVP regular RBOB (F1).

- Argus' assessments for premium RBOB (H grade - PA0003994) in the Gulf coast will be for 7.4 RVP premium RBOB (H1).

Please contact David Ruisard at david.ruisard@argusmedia.com or 713-429-6306 or Paul Dahlgren at paul.dahlgren@argusmedia.com or 713-429-6324 with questions or comments.

USAC spring 2022 RVP shifts

The following is a collection of upcoming US Atlantic coast gasoline RVP shifts for 2022:

- Effective cycle 14 on Colonial pipeline in the US Atlantic coast: Argus assessments for 93 conventional V-grade (PA0004398, PA0004379) will be for 11.5 RVP (V3). Argus will stop publishing a dedicated assessment for 13.5 RVP 93 conventional (V4) on cycle 14. Effective cycle 16: Argus assessments for regular 93 conventional V-grade will be for 9 RVP (V2).
- Effective cycle 14 on Colonial pipeline in the US Atlantic coast: Argus assessments for 87 conventional M-grade (PA0004396, PA0004377) will be for 11.5 RVP (M3). Argus will stop publishing a dedicated assessment for 13.5 RVP 87 conventional (M4) on cycle 14. Effective cycle 16: Argus assessments for 87 conventional M-grade will be for 9 RVP (M2).
- Effective cycle 14 on Colonial pipeline in the US Atlantic coast: Argus assessments for 87 CBOB A-grade (PA0018530, PA0018529) will be for 11.5 RVP (A3). Argus will stop publishing a dedicated assessment for 13.5 RVP 87 CBOB A-grade (A4) on cycle 14. Effective cycle 16: Argus assessments for regular CBOB A-grade will be for 9 RVP (A2).
- Effective cycle 14 on Colonial pipeline in the US Atlantic coast: Argus assessments for regular RBOB F-grade (PA0019881, PA0019880) will be for 11.5 RVP (F3). Argus will stop publishing a dedicated assessment for 13.5 RVP regular

ANNOUNCEMENTS

RBOB F-grade (F4) on cycle 14. Effective cycle 16: Argus assessments for regular RBOB F-grade will be for F1.

■ Effective 1 March: Argus assessments for US Atlantic coast barge and Buckeye pipeline dead prompt and prompt regular RBOB (PA0011736, PA0004400, PA0011727, PA0004381, PA0011740, PA0004401, PA0011731, PA0004382) will be for 13.5 RVP RBOB. Effective 15 March: Argus assessments for US Atlantic coast barge and Buckeye pipeline dead prompt and prompt regular RBOB will be for both 7.2 and 13.5 RVP RBOB. Effective 16 April: assessments will be for only 7.2 RVP RBOB. Effective 1 May: assessments will be for only 7.4 RVP RBOB.

■ Effective 1 March: Argus assessments for US Atlantic coast barge and Buckeye pipeline dead prompt and prompt premium RBOB (PA0011737, PA0004403, PA0011728, PA0004384, PA0011741, PA0011732, PA0004411, PA0004392) will be for 13.5 RVP RBOB. Effective 15 March: Argus assessments for US Atlantic coast barge and Buckeye pipeline dead prompt and prompt premium RBOB will be for both 7.2 and 13.5 RVP RBOB. Effective 16 April: assessments will be for only 7.2 RVP RBOB. Effective 1 May: assessments will be for only 7.4 RVP RBOB.

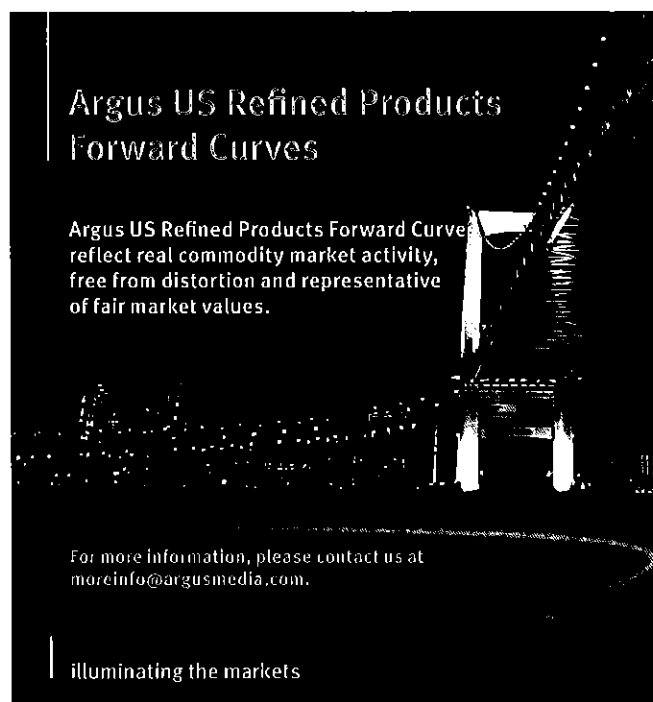
■ Effective 1 March: Argus assessments for US Atlantic coast barge and Buckeye pipeline dead prompt and prompt regular CBOB (PA0011734, PA0005502, PA0012003, PA0008839, PA0011725, PA0005504, PA0011738, PA0006587, PA0012004, PA0008841, PA0011729, PA0006588) will be for 12.9 RVP CBOB. Effective 15 March: Argus assessments for US Atlantic coast barge and Buckeye pipeline dead prompt and prompt regular CBOB will be for 7.6, 8.8, and 12.9 RVP CBOB. Effective 16 April: assessments will be for only 7.6 and 8.8 RVP CBOB. Effective 1 May: assessments will be for only 7.8 and 9.0 RVP CBOB.

■ Effective 1 March: Argus assessments for US Atlantic coast barge and Buckeye pipeline dead prompt and prompt premium CBOB (PA0011735, PA0005503, PA0012005, PA0008840, PA0011726, PA0005505, PA0011739, PA0006590, PA0012006, PA0008842, PA0011730, PA0006591) will be for 12.9 RVP CBOB. Effective 15 March: Argus assessments for US Atlantic coast

barge and Buckeye pipeline dead prompt and prompt premium CBOB will be for 7.6, 8.8, and 12.9 RVP CBOB. Effective 16 April: assessments will be for only 7.6 and 8.8 RVP CBOB. Effective 1 May: assessments will be for only 7.8 and 9.0 RVP CBOB.

■ Effective 1 March: Argus assessments for US Atlantic coast Laurel pipeline regular CBOB (PA0007723, PA0008865) and premium CBOB (PA0008323, PA0008866) will be for 12.9 RVP CBOB. Effective 15 March: Argus assessments for US Atlantic coast Laurel pipeline regular and premium CBOB will be for 12.9 and 8.8 RVP CBOB. Effective 1 April: assessments will be for only 8.8 CBOB. Effective 1 May: assessments will be for only 9.0 CBOB.

Please contact David Ruisard at david.ruisard@argusmedia.com or 713-429-6306 or Stephanie Crawford at stephanie.crawford@argusmedia.com or 713-429-6356 with questions or comments.



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Argus US Products is published by Argus Media group

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ISSN: 1086-2498
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GOVERNOR OF PUERTO RICO
Pedro R. Pierluisi

March 24, 2022

VIA ELECTRONIC MAIL

Mr. David A. Skeel, Jr.
Chair
The Financial Oversight and
Management Board for Puerto
Rico
P.O. Box 192018
San Juan, PR 00919-2018

Re: *Reconsideration of Request for PREPA Emergency Funds*

Dear Mr. Skeel:

I received your letter, dated March 17, 2022, in which the Oversight Board denied the Government's March 10 request for access to the Commonwealth's Emergency Reserve Fund as needed to stabilize and mitigate the economic harms of rising global energy costs. I appreciate the Board's acknowledgment that the financial burden of these costs will have a disproportionate impact on Puerto Rico's most vulnerable citizens. I also appreciate the Board's recommendations for the use of federal funding to minimize the effects of any rate increases. The Government will certainly evaluate its options to optimize its use of existing federal funds and programs. But the Government believes that federal funds alone will be insufficient to fully address the current global energy crisis, even after maximizing our use of those programs. Based on your letter, we seem to agree that a cash injection into PREPA to prevent future electricity rate hikes is necessary, but disagree on the amount and source of funding.

Importantly, the requested funding is a consequence of a *force majeure* and not necessarily due to "operational inefficiencies" at PREPA or any Government policy. This atypical and unforeseen emergency is caused primarily by Russia's unjust war against Ukraine and the resulting economic sanctions that have constrained global oil supply. These complex geo-political events are extraordinary and wholly outside the Government's control. If we can take action

A handwritten signature in dark ink, appearing to be the initials "PS" or similar, located to the left of the final paragraph of text.

to prevent it, the people and economy of Puerto Rico should not be forced to suffer the negative consequences of those events.

I urge the Board to reconsider its position. As noted in my March 10 letter, global energy prices have unexpectedly skyrocketed and continue to be volatile over the last month. The impact on Puerto Rico cannot be overstated: the unexpected and increased price of oil needed for our electricity generation will require significant and abrupt rate increases at PREPA to address the emergency. If anything constitutes an emergency, this is it. The current emergency might not be a consequence of a natural disaster, but its economic consequence on the Puerto Rico are nevertheless the same. Without additional funding, PREPA's electricity costs, which are already among the highest in the nation, will need to be increased, forcing many citizens to choose between keeping the lights on or feeding their families—a choice no one should have to make. And increased energy costs also will likely reduce people's movement and other economic activity across the Island. If left unaddressed, these downstream negative effects could jeopardize Puerto Rico's recent and nuanced economic recovery that we jointly desired and have been working to achieve.

I must also emphasize that the Government is not requesting unconditional use of the Emergency Reserve Fund. The Board has, and will continue to have, authority over the final approval of any disbursements from the Emergency Reserve Fund, including the amounts and timing for the release of any funds. But failing to approve **access** to the Emergency Reserve Fund now could expose Puerto Rico to evitable negative economic effects. Time is of the essence and acting now would help the Government more effectively address this energy emergency as it unfolds.

The Government will appreciate the Board's reconsideration of its decision regarding the requested access to the Emergency Reserve Fund to mitigate the negative impacts of the current global energy emergency and will be willing to submit any necessary amendment to the Commonwealth's Certified Fiscal Plan for the Board's consideration. As always, we look forward to continuing to collaborate with you to achieve our common goals for the benefit of the people of Puerto Rico.

Sincerely,



Cc: Andrew G. Biggs
Arthur J. González

Antonio L. Medina
John E. Nixon
Justin M. Peterson
Betty A. Rosa
Natalie A. Jaresko
Jaime El Koury
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