BP PLC Form 6-K July 03, 2006

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

Report of Foreign Issuer

Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

for the period ended 03/July/2006

BP p.l.c. (Translation of registrant's name into English)

1 ST JAMES'S SQUARE, LONDON, SW1Y 4PD, ENGLAND (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F	X	Form 40-F	

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes	No	X

July 3, 2006

BP Second Quarter 2006 Trading Update

This trading update is aimed at providing estimates regarding revenue and trading conditions experienced by BP in the second quarter ended June 30, 2006, and estimates of identified non-operating items expected to be included in that quarter's result. The second quarter margin, price, realisation, cost, production and other data referred to below are currently provisional, some being drawn from figures applicable to the first month or so of the quarter. All such data are subject to change and may differ quite considerably from the final numbers that will be reported on July 25, 2006. In particular, data is not

available at this time that would allow an estimate of potential IFRS fair value accounting gains or charges, or of any potential consolidation adjustment. This trading update is produced in order to provide greater disclosure to investors and potential investors of currently expected outcomes, and to ensure that they all receive equal access to the same information at the same time.

Exploration and Production

Marker Prices	2Q ' 05	3Q ' 05	4Q ' 05	1Q ' 06	2Q ' 06
Brent Dated (\$/bbl)	51.63	61.63	56.87	61.79	69.53
WTI (\$/bbl)	53.08	63.18	60.01	63.29	70.40
ANS USWC (\$/bbl)	50.10	60.91	57.89	60.89	68.78
US gas Henry Hub first of month index					
(\$/mmbtu)	6.74	8.53	13.0	9.01	6.80
UK gas price - National Balance Point					
(p/therm)	30.15	29.26	65.30	70.00	34.59
Urals (NWE - cif) (\$/bbl)	48.08	57.13	53.23	58.15	64.68
Russian domestic Oil (\$/bbl)	27.39	36.60	36.60	35.27	33.77

Overall BP production in 2Q'06 is expected to be around 4,010 mboed (thousand barrels of oil equivalent per day). Excluding volumes from TNK-BP operations, production in 2Q'06 is expected to be around 3,010 mboed, versus 3,041 mboed in 1Q'06. This reduction primarily reflects the impact of divestments. BP's net share of production from TNK-BP is expected to be approximately 1,000 mboed, versus 994 mboed in 1Q'06.

Refining and Marketing

\$/bbl	2Q ' 05	3Q ' 05	4Q ' 05	1Q ' 06	2Q ' 06
USA					
- West Coast	14.53	17.57	8.90	11.22	21.33
- Gulf Coast	9.37	17.12	11.64	10.86	17.77
- Midwest	7.45	13.40	7.91	4.89	14.72
North West Europe	5.68	7.78	5.51	2.88	5.78
Singapore	6.30	6.52	4.42	3.54	6.85
Refining Global Indicator Margin	8.42	12.35	7.60	6.28	12.61

^{*} The Refining Global Indicator Margin (GIM) is a generic indicator. Actual margins realised by BP may vary significantly due to a variety of factors, including specific refinery configurations, crude slate and operating practices.

The second quarter's Global Indicator Margin (GIM) was higher than the GIM for both 1Q'06 and 2Q'05. The increase in BP's actual refining margins quarter on quarter is expected to be slightly lower than that suggested by the increase in the GIM. Overall marketing margins are expected to be similar to those in 1Q'06. The phased re-commissioning of the Texas City refinery commenced at the end of March.

Gas, Power and Renewables

GP&R margins for the quarter are expected to be higher than 1Q'06 largely due to improved North American margins.

Other Businesses and Corporate

The charge in Other Businesses and Corporate is expected to be in line with guidance given in our February 2006 Strategy Presentation for an annual charge of 900m + - 200m.

Identified Non-Operating Items (NOIs)

Aggregate non-operating items in 2Q'06 are not expected to be material, with gains (primarily from asset sales) offsetting other items (including an incremental charge of around \$500m with respect to the 2005 Texas City refinery incident).

Interest Expense

The total consolidated interest charge is expected to be around \$100m.

Tax Rate

The effective tax rate for the quarter is expected to be around 36 per cent, slightly higher than in 1Q'06, due largely to rising oil prices. This does not include the impact of the yet-to-be enacted increase in the UK North Sea tax rate, which is currently expected to be recognised in 3Q'06. The anticipated 2006 full year effective tax rate remains at around 39 per cent, as indicated in our February 2006 Strategy Presentation.

Gearing

Gearing for the quarter is expected to be similar to the 1Q'06 level of 16 per cent.

Distributions to Shareholders

During the quarter the company bought back 376 million shares for a total consideration of \$4.5bn. Shares outstanding at June 27th 2006, excluding treasury shares, were 19,993 million. As in previous quarters, BP has entered into an arrangement that allows the share buy back programme to be continued during the closed period which commenced at close of business in London on June 30th. The 2Q'06 dividend of 9.375 cents per share announced at the time of our 1Q'06 results was paid in June. The dividend to be paid in 3Q'06 will be announced on July 25th in conjunction with our 2Q'06 Stock Exchange Announcement.

Rules of Thumb

Important note: The rules of thumb shown below were provided with BP's strategy update on February 7th, 2006 and were intended to give directional indicators of the impact of changes in the trading environment relative to that of 2005 on BP's 2006 full yearpre-tax results. These rules of thumb are approximate. Especially over short periods, changes in prices, margins, differentials, seasonal demand patterns, and other factors can be material. Particular differences may arise due to higher government shares of Exploration and Production revenues in some jurisdictions at current price levels, as well as from variations between the refining Global Indicator Margin (GIM) and BP's realised refining margins due to crude price levels and differentials, product price movements and other factors. The GIM rule of thumb reflects the sensitivity to the overall group to changes in refining margins. Many other factors will affect BP's earnings quarter by quarter. Actual results in individual quarters may therefore differ significantly from the estimates implied by the application of these rules of thumb.

2006 Operating Environment Rules of Thumb: impact on replacement cost pre-tax operating profit per year of changes relative to 2005 environment

Oil Price - Brent +/- \$1/bbl Gas - Henry Hub +/- \$ 0.10/mcf Refining - GIM +/- \$ 1/bbl Full Year \$500m \$80m \$950m

This trading update contains forward looking statements, particularly those regarding oil and gas production; BP's net share of production from TNK-BP; refining and marketing margins; margins in the GP&R business; the charge in Other Businesses & Corporate; the amount of non-operating items; the total consolidated interest charge; the effective tax rate; and gearing. By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that will or may occur in the future.

Actual results may differ from those expressed in such statements depending on a variety of factors, including the timing of bringing new fields on stream; future levels of industry product supply, demand and pricing; operational problems; general economic conditions; political stability and economic growth in relevant areas of the world; changes in laws and governmental regulations; exchange rate fluctuations; development and use of new technology; changes in public expectations and other changes in business conditions; the actions of competitors; natural disasters and adverse weather conditions; wars and acts of terrorism or sabotage; and other factors discussed elsewhere in this trading update and in BP Annual Report and Accounts 2005.

- ENDS -

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BP p.l.c.
(Registrant)

Dated: July 3, 2006 /s/ D. J. PEARL

D. J. PEARL

Deputy Company Secretary