H. Lamar McKay, Chairman & President, BP America responses for
US House Energy and Commerce Subcommittee on Energy and Environment
Pre-hearing Questions
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1. Please detail the capital investments BP has made in oil and gas exploration in each of the last three fiscal years? Of these investments, please detail how much was spent on exploration of new fields?

The table below details BP's worldwide capital expenditures for exploration and production.

Exploration & Production Capital Expenditures and Acquisitions ($ millions)	**2007**	**2008**	**2009**
BP plc	14,207	22,227	14,896

The table below details BP's worldwide exploration and appraisal costs on new fields.

Exploration and Appraisal Costs ($ millions)	**2007**	**2008**	**2009**
BP plc	1,892	2,290	2,805

2. How much money has BP invested in each of the last three fiscal years on research and development generally? Of these research and development investments, how much was focused on the research and development of safer offshore drilling technologies? How much was focused on technologies related to rig safety and accident prevention? How much was focused on spill response technologies? How much was focused on research regarding renewable and alternative energy sources? Please break down that investment by renewable energy type (e.g., wind, solar, etc.).

Research and Development expenditure ($ millions)	**2007**	**2008**	**2009**
BP plc	566	595	587

BP has spent roughly $600 million per year on R&D. Currently, exploration and production accounts for roughly 40% of BP's R&D expenditures, refining and marketing is 35% and alternative energy makes up the remaining 25%. The share dedicated to alternative energy reflects the growing potential of AE in BP's energy portfolio. The figures below do not include amounts spent on technical excellence, field trials or demonstration projects, which together are approximately equal to reported R&D spend.

Alternative Energy R&D Expenditure ($ millions)	2007	2008	2009
Solar	7	10	11
Wind	1	5	5
Bioscience (including biofuels)	27	58	100
Carbon Capture & Storage	10	13	14
Other (not renewables)	4	13	12
BP plc	50	99	141

Safety is embedded in everything that we do, thus much of our capital and operating spend incorporates elements of safety.

By the narrow definition of R&D as a distinct program and set of accounts, E&P R&D contains several programs that focus on safety and reliable offshore operations including drilling. The program on drilling technology is focused on measurement by drilling, downhole gas detection and resistivity ahead of bit. The total spent in this area over the last 3 years is approximately $29M.

However, this amount does not cover the full amount of R&D embedded in our spend and that of our contractors. By way of example, BP's Thunderhorse production facility contains hundreds of technology firsts in well completions, subsea and topsides facilities which in total cost several billion to develop, manufacture and install over a period of 10 years. None of these expenditures were accounted for as BP's R&D but BP nonetheless paid suppliers to develop them. Additionally, we work with suppliers in the design and development of safe drilling equipment**.** BP's contribution to these efforts is not classified as R&D.

3. How much has BP invested in deployment of renewable or alternative energy in each of the last three fiscal years? Please break that down that investment by renewable energy type (e.g. wind, solar, etc.). What proportion of your revenue is currently derived from renewable or alternative energy production?

Alternative Energy Capital Expenditure and Revenue Investment ($ millions)	2007	2008	2009
Solar	146	187	80
Wind	336	586	874
Biofuels	0	235	218
Other (not renewables)	0	107	87
BP plc	482	1,115	1,259

Alternative Energy Revenue ($ millions)	2007	2008	2009
BP plc	731	961	794

Total Revenue ($ millions)	2007	2008	2009
BP plc	284,365	361,143	239,272
% Alternative Energy	0.26%	0.27%	0.33%

4. What steps do you believe the U.S. government and private industry should take to reduce the threat posed by climate change? Does BP support an economy wide cap on greenhouse gas emissions that includes transportation fuels? Would BP be able to pass any of the cost of purchasing emission allowances through its customers? If so, what percentage would be passed through?

   BP supports a comprehensive climate and energy policy that includes development of all forms of energy (oil, natural gas, coal, nuclear, biofuels, wind, solar, etc.) and encourages efficiency and conservation.

   BP supports an economy-wide price for carbon based on fair and equitable application across all sectors and believes that market based solutions, like a Cap and Trade or linked-fee are the best solutions to manage GHG emissions. These market-based approaches should be applied nationally for maximum environmental effectiveness at reducing emissions across the US economy, treat all energy consumers equitably, and facilitate investment in sustaining and creating jobs.

   In a market-based carbon pricing system, BP believes in transparency and fair and equitable treatment to avoid misallocation of capital from one industrial sector to another. Fair and equitable treatment would generate a price signal on all forms of energy in a manner that:

   - Will allow consumers to make informed choices and change their every day energy decisions
   - Will drive the least cost solutions and reductions across the US economy
   - Will provide companies the certainty that is necessary to drive technological advances and deployment.

   Particular to our business, U.S. refineries are exposed to international competition and are currently operating in an over-capacity market, therefore it is critical that climate legislation treats refiners fairly otherwise we risk the

closure of more US refineries, an increase in product imports, and the loss of US jobs.

Additionally, we support a linked fee for transport fuels, because it imposes a transparent carbon price at the wholesale distribution point for fuels and levels the playing field for domestic refiners. Absent a linked fee mechanism, refiners would bear the obligation of acquiring allowances to cover the consumer use of transportation fuels. In a sector saddled with global overcapacity and weak consumer demand, this system could burden refiners with stranded costs that could be significant – making domestic refiners more uncompetitive in the globally traded refined product market. While the level of pass through can't be determined, it won't be 100%. Even at very high recovery rates, the stranded costs for BP could be several hundred million annually.

5. Is the view of BP that the world oil market is a free market where oil prices are dictated solely by supply and demand? If no, what other factors determine the global price of oil?

   BP has long maintained that changes in oil supply and demand - and expectations of future supply/demand trends - are the principal drivers of oil prices. However, OPEC also influences prices by managing production levels as well as investment/production capacity. Moreover, many governments limit the ability of investors to access resources and adopt policies to shield consumers from price signals.

   Earlier this decade, strong economic growth helped to push oil demand and prices higher – but government subsidies shielded consumers from these higher prices in many emerging-economies. The unprecedented increase in oil prices spanning seven consecutive years through 2008 was due in part to the strongest period of global economic growth in a generation. This trend ended when global recession cut demand causing a sharp decrease in oil prices. OPEC responded to lower demand by cutting oil production (beginning in September 2008 and continuing to this day) which led to a decline in global oil production last year (despite a large increase in US production). The recent resumption of economic growth has supported prices.

   In addition, the adjustments of producers and consumers alike to price signals are complicated by the long lead times for investments in new production, and the long economic lives of oil-consuming equipment. While other factors, such as financial markets, may at times add momentum to price movements, we do not believe that they have been the principal driver of oil price movements in recent years.

6. How many offshore leases does your company hold under the Deep Water Royalty Relief Act that are not subject to the suspension of royalty relief based on market price? How much does BP project to avoid in royalty payments on these leases over the next five years and over the next twenty-five years?

   BP holds 760 deepwater leases in the Gulf of Mexico. Of this total, 37 leases are subject to deepwater royalty relief which does not depend on market price.

   It is difficult to estimate the amount of future royalty relief that may be associated with these 37 leases. Some of these leases are associated with fields which are currently operating. Others are associated with potential new developments, some near term and others long term. The amount of royalty relief that can be expected to be realized from these leases will be a function of several factors, including: the success and failure or exploratory and appraisal work, the scope and timing of new developments, the production from the fields once developed, market prices for oil and gas, and the price differentials between benchmark prices for oil and gas and what BP as a oil and gas seller would realize. The differential between benchmark oil and gas prices and those realized by the seller are themselves a function of oil quality and transportation charges, amongst other factors.

7. What impact would drilling by BP in the U.S. Atlantic and Pacific Outer Continental Shelf areas previously under moratoria have on U.S. motor gasoline prices in 2020 and 2030? What impact would it have on total U.S. oil production and consumption?

   BP can't speculate on what changes may occur to gasoline prices over the next 20 years if new areas of the outer continental shelf were made available for development. However, we can comment on what we have seen in terms of development and the market's reaction to changes in US production of oil and gas over the last year. We believe these impacts are indicative of what could occur in the future do to changes in US supply and demand.

   As detailed in the 2010 edition of the BP Statistical Review of World Energy, the United States had by far the largest increase in oil production in the world in 2009. US output rose by 460,000 b/d, or 7%. In addition, consumption fell for a fourth year in a row due to the combination of the recession and lingering impacts of high prices.

   - According to the US DOE, US production growth last year was driven by increases in the Gulf of Mexico Outer Continental Shelf which grew by

390 Kb/d, triple the previous record growth. New fields and a light year for hurricane disruptions sustained this increment.

- With consumption declining and production increasing, US net oil imports fell sharply (-1.4 million b/d, or -12.6%). US (net) imports of 9.5 million b/d of oil (crude and refined products) in 2009 were the lowest since 1998. Net import dependence of 51% was the lowest since 1999.

US consumers benefitted from lower oil and natural gas prices in 2009.

Average US crude oil prices (WTI) declined by 38% in 2009, with prices reaching the lowest levels since 2005. The decline in prices was in large part due to lower US & global consumption, combined with increased non-OPEC supply.

US natural gas prices have also weakened, falling by 56% (Henry Hub) in 2009. Again, strong supply growth combined with weaker consumption helped to push US natural gas prices to record discounts relative to oil prices, and into a range competitive with coal.

8. Does BP support the elimination of the subsidies for oil and gas companies identified in the President's Budget Request for Fiscal Year 2011?

   The oil and gas sector operates with tax policies and accounting principles available to all manufacturing sectors that create jobs and support capital investment. Many of these programs have been available for decades and are responsible for stimulating new development and production of oil and gas as well as making critical investments in refinery and other energy infrastructure. We operate in a global market for capital and development opportunities. An excessive increase in taxes, royalties and other government take will make the US less attractive as an investment opportunity. This will in the long run reduce US energy production, reduce the US revenue base as well as eliminate good, high-paying jobs.

   BP recognizes the need for the US to raise additional revenue. We commit to work with policymakers on the broader areas of tax reform to ensure that any changes to the tax code do not jeopardize US energy and economic security and jobs.

9. How many deep water oil rigs does your company operate in the Gulf of Mexico; how many does it operate around the world? In which countries are these rigs located? What are the major differences in regulatory, royalty and tax policies between these countries that affect your operations and how do they compare to the United States?

BP currently has 4 deep water developments and prospects in the Gulf of Mexico where drilling rigs are operating. Three of these rigs are dedicated to the current Deepwater Horizon incident response (Transocean's Enterprise, Development Driller II and Development Driller III rigs). The remaining Gulf of Mexico deep water drilling rig is located on the Thunderhorse semi-submersible.

Worldwide, including the Gulf of Mexico, BP currently has 11 locations where deep water drilling rigs are operating. The countries of operation and rig count are as follows: USA, Gulf of Mexico - 4; United Kingdom - 2; Azerbaijan - 2; Norway - 1; Egypt -1; and Angola - 1.

The number and location of deepwater drilling rigs will change as drilling programs change.

The regulatory and fiscal systems under which we operate vary from country to country. The US has adopted a concession system that provides ownership rights in natural resources in exchange for making bonus, rental, royalty and income tax payments to the government. In other countries, we operate under production sharing agreements in which we receive a variable share of the resource that is produced (depending on the prevailing price level) as well as pay bonus and income tax payments. In yet other countries, instead of taking title to the resource we receive a fee based on the amount produced.

10. What dispersants does BP have stores of and why were they selected? How much of each formulation do you have? Where are the stores kept? What are the logistical and implementation challenges, if any, associated with changing types of dispersants?

    As of June 9, 2010, BP has an inventory of Corexit EC9500A and Sea Brat #4. Corexit, a dispersant that has been expressly approved in the National Contingency Plan Product Schedule (NCPPS) maintained by the EPA, was the only dispersant that was available immediately, in sufficiently large quantities, to be useful at the time of the spill associated with the Deepwater Horizon incident.

    BP has also obtained small samples of 100 gal or less of other dispersants in order to perform further toxicity and efficacy tests and anticipates providing a recommendation on their possible role as alternates to Corexit EC9500A to the EPA by June 25, 2010.

    Any changeover would require typically a week to secure supply agreements and for production to start and another week to establish and transit an initial

stock of the dispersant to support the response effort. Any changeover in dispersant would require between 24 and 48 hours for vessel and aircraft equipment clean-out and recalibration.

Our dispersant inventory and locations are:

Corexit 9500

89,000gal @ Port Fuchon, LA - 47,000gal at Sea on the Skandi - 22,000 gal inbound to Pt Fuchon from Nalco

52,500 gal at Houma Airport, LA

187,000 gal @ Stennis Airport, Miss 31,000 inbound to Stennis from Nalco Fri-Sat.

Sea Brat #4

100,000gal @ Amelia, LA

11. Does BP conduct any evaluations regarding the efficacy or the toxicity of dispersants and if so what are the results?

    In accordance with EPA's Monitoring and Assessment Directive for subsea dispersant use, BP has committed to:

    a. Minimize as much as possible the use of dispersants while meeting the objectives of the Unified Area Command response, including deploying less than 15,000 gallons subsurface application per calendar day.
    b. Review the scientific literature for case studies on the actual use of dispersants, their efficacy and the impact their use had on the environment.
    c. Continue our search for an alternative dispersant that is available, effective and less toxic.

    We have evaluated all dispersants on the EPA National Contingency Plan Product schedule. While each of these dispersants have been approved for use by the EPA, our evaluation reviewed the availability of sufficient volumes for practical application, the acute and chronic toxicity based on published data, and the effectiveness in laboratory and field tests.

    In our initial assessment of alternatives, 12 of the 13 alternatives to Corexit EC9500A, were removed from consideration due to either a lack of

availability, higher toxicity than Corexit EC9500A, or the presence of compounds that may contain nonylphenol (NP), an endocrine disruptor.

The remaining alternative, Dispersit SPC 1000, has a lower toxicity than Corexit EC9500A, but considerably higher than the criteria established by the EPA in its request for BP to find an alternative.

We are continuing to conduct additional toxicity and efficacy testing on Corexit EC9500A and potential dispersant alternatives in accordance with the testing protocols of the EPA Directive. We anticipate delivering a formal recommendation on June 25, 2010.

12. Does BP have a financial interest in or other relationship with any companies that manufacture or sell and EPS-approved dispersant?

    BP is not aware of any financial or share ownership interest in any of the eleven companies that manufacture or sell an EPA-approved dispersant. We are aware that a former executive of BP is currently serving as a non-executive director for Nalco, the manufacturer of Corexit EC9500A and EC9527A. The eleven manufacturers of EPA-approved dispersant will have past and current directors, officers and employees some of whom may have been directors, officers or employees of BP. These same eleven manufacturers will each have supply chains which may depend on petrochemical feedstocks which may be supplied by a BP company. BP's own supply chain encompasses approximately 40,000 suppliers who meet our oil and gas operational needs, and may include products sold by these manufacturers.

13. What recommendations does BP have for improving the safety of offshore drilling and the efficacy of oil spill response?

    At the request of the Department of Interior, BP participated in the task forces that provided input to the Secretary concerning changes necessary to better insure the safety and integrity of offshore development. Additionally, based on the understanding we have gained thus far, we have offered the Secretary the following suggestions for consideration:

    - Recall and recertify all BOPs that they operate to OEM specifications and can satisfy the well design intent;
    - Implement an Enhanced Testing Regime which better simulates emergency operations;
    - Evaluate redesigning BOPs with a focus on redundancy and reliability;
    - Enhance Industry SubSea Response / Intervention Capability.

Additionally, BP has recently announced a 10 year research grant of $500M to examine topics including:

- Where are the oil, the dispersed oil, and the dispersant going under the action of ocean currents?
- How do oil, the dispersed oil and the dispersant behave on the seabed, in the water column, on the surface, and on the shoreline?
- What are the impacts of the oil, the dispersed oil, and the dispersant on the biota of the seabed, the water column, the surface, and the shoreline?
- How do accidental releases of oil compare to natural seepage from the seabed?
- What is the impact of dispersant on the oil? Does it help or hinder biodegradation?
- How will the oil, the dispersed oil, and the dispersant interact with tropical storms, and will this interaction impact the seabed, the water column and the shoreline?
- What can be done to improve technology:
    - To detect oil, dispersed oil, and dispersant on the seabed, in the water column, and on the surface?
    - For remediating the impact of oil accidently released to the ocean?

BP already has ongoing marine research programs in the Gulf of Mexico. Building on these, BP will appoint an independent advisory panel to construct the long term research program. Where appropriate, the studies may be coordinated with the ongoing natural resources damages assessment. The program will engage some of the best marine biologists and oceanographers in the world. More immediately, a baseline of information for the long term research program is needed. A first grant to Louisiana State University has been made to initiate this work.