California Energy Commission Staff
OVERVIEW OF PROPOSED TRANSPORTATION FUELS ANALYSES FOR THE 2005 ENERGY REPORT

STAFF PAPER

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LONG-TERM FUEL PRICE FORECASTS

This year's world oil and state fuel price forecasts come at a time of great uncertainty in petroleum markets. Crude oil, gasoline and diesel prices have all recently breached record nominal highs. Although still far from record highs for prices adjusted for inflation, markets have seemed ready to spike at the slightest provocation, while at the same time the potential for a substantial downward correction seems equally imminent.

The Energy Commission uses projections of world oil prices to support transportation sector fuel price forecasts, demand forecasts and policy analyses, and to support the natural gas price forecast. In this task, staff has attempted to make the crude oil and natural gas price forecasts consistent. In the absence of an in-house integrated global energy market modeling capability, this has meant relying to a large extent on supply and price projections developed by the U.S. Department of Energy/Energy Information Administration (US DOE/EIA). This has been supplemented where necessary with additional projections based on statistical analysis of historical data from US DOE/EIA and other sources.

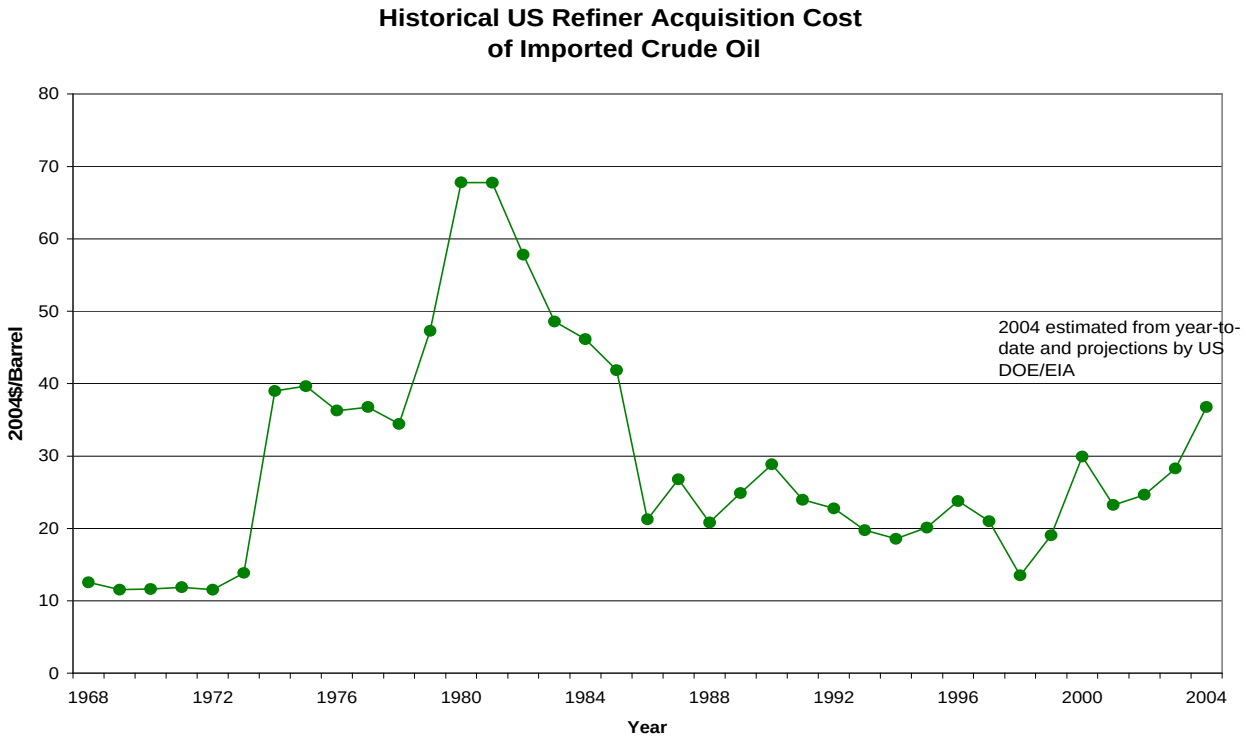
Due to numerous factors creating uncertainty in oil markets both in the short- and long-term, staff recommends using planning scenarios that target a range of possible future oil and fuel prices, instead of developing a base case. Moreover, staff proposes two scenarios at this time to reduce the likelihood that a third mid-price range scenario will by default become the base case. The two scenarios attempt to define the range of plausible and sustainable long-term price projections. Since Commission forecasting and policy analysis tools typically require a time series of specific annual average prices, the scenarios are provided as so-called single-point forecasts. Price variation around these long-term projections is assumed to be potentially substantial, at least as high as variation around long-term average prices has been historically.

The two proposed planning scenarios referred to as Constrained Supply and Business As Usual rely on crude oil price forecasts for the US DOE/EIA high oil price case and reference case, respectively. These US DOE/EIA cases project long-term prices for U.S. refiner acquisition costs of imported crude oil prices of approximately $36 per barrel for the high case and $28 per barrel for the reference case in 2025. California retail fuel price projections are determined using historical relationships of crude oil prices and state fuel prices. In the Constrained Supply scenario price projections are $2.13 per gallon for regular-grade reformulated gasoline and $2.07 per gallon for diesel in 2025. The Business As Usual scenario projects prices of $1.81 per gallon for gasoline and $1.78 for diesel in 2025. All prices are in inflation-adjusted 2004 dollars, unless otherwise noted.

Background

Historical data on U.S. refiner acquisition costs of imported crude oil as reported by the US DOE/EIA is shown in Figure 1. Following the prolonged price spike of the late 1970s and early 1980s, a pricing regime dominated by spot and futures markets has tended to confine oil prices within the $20-$30 per barrel price range. Of particular note is the low average price for 1998, which may be in part responsible for the restrained levels of investments in oil exploration and production capability in the ensuing years. The narrow supply/demand balance that developed is characterized by very low world excess oil production capacity and low inventories and has contributed significantly to the higher prices now being experienced.

Figure 1.



In addition to constrained investment in oil exploration and production, the world oil supply/demand balance is currently being squeezed by high growth rates in world petroleum demand. China and India growth rates are often noted, but U.S. demand is also important. Recent estimates of world petroleum demand growth in 2004 are about 2.7 million barrels/day, or 3.4% over 2003, reaching an estimated 82.4 million barrels per day[i]. Meanwhile, world oil markets are being roiled by numerous other factors, including: the war in Iraq and sabotage of Iraq's oil facilities; weather, particularly Hurricane Ivan, but also forecasts for a cold coming winter; low inventories of crude oil and heating oil; strikes and social unrest in important oil-producing countries, such as

Nigeria, Venezuela and Norway; the Russian government's pressure on the important producing company Yukos; and the devaluation of the dollar against other currencies. In a context of very limited excess world oil production capacity, these and other similar factors can continue to push oil prices higher.

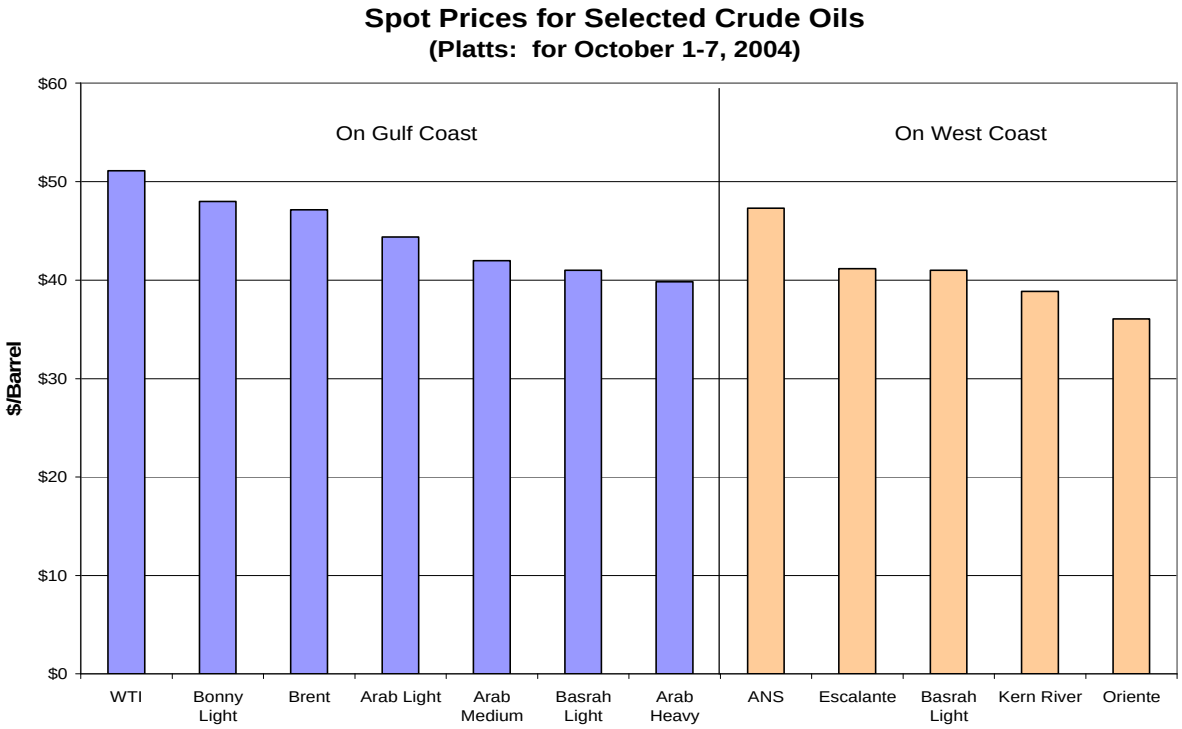
One factor that has not convincingly been implicated in recent price spikes is resource depletion. It is generally conceded that oil is becoming harder to find, and that many important producing regions are declining. However, staff believes that a reluctance to invest capital is a major factor limiting the production side of the supply/demand balance at this time.

Finally, while oil prices are important, California's transportation fuels markets have their own characteristics that influence pricing of end use fuels. With a narrow margin for error in supplying California (and via California – Nevada, Arizona, and Oregon), the region's petroleum refining sector has repeatedly been vulnerable to refinery or pipeline outages. These may occur as unplanned outages, or sometimes as scheduled maintenance that becomes unexpectedly prolonged. The difficulty in procuring imports in a timely manner in response to unexpected shortages leads to larger and more prolonged price spikes[ii]. At the same time, the Commission has noted the forecasted widening gap between future state fuel demand and refinery capacity, leading to a variety of proposals to expand petroleum importing infrastructure or to reduce demand[iii].

Oil Price Indexes

The subject of indexes for crude oil prices warrants some further brief discussion. The index used in Figure 1 is the average U.S. refiner acquisition cost of imported crude oil as reported by US DOE/EIA. Oil prices that are typically reported in the press are for light sweet crude oil purchased on the New York Mercantile Exchange (NYMEX), referred to as West Texas Intermediate (WTI). This is an unusually high quality crude oil because it is "light," hence high-yielding for gasoline, and "sweet," meaning low in sulfur. Because of these qualities, it is priced far above the average quality crude oil, especially imported oil, and particularly so in the wake of Hurricane Ivan which shut down much Gulf of Mexico light oil production. Figure 2 compares the spot prices of several crude oils commonly sold in the Gulf Coast and West Coast markets during a recent week. The difference between spot WTI prices and average U.S. refiner acquisition costs of imported crude oil reported by US DOE/EIA was over $5 per barrel during September 2004. The difference between WTI and average world oil spot prices grew to almost $10 per barrel during October 2004.

Figure 2.



World Oil Price Scenarios

In proposing the following two planning scenarios, labeled Constrained Supply and Business As Usual, staff attempts to provide policy makers with a means to test the robustness of potential energy policies under a range of plausible future petroleum prices. The following two questions would be prudent to ask at this point in time. First, what if current conditions and prices cannot be easily undone, and become the norm for world oil and state fuel markets? Alternatively, what if the market adjusts as it has repeatedly in the past, responding to price signals that encourage investments on both the supply and demand side, and reverting back to somewhere closer to its long-term inflation-adjusted average.

Both scenarios share common supply assumptions from the 2004 US DOE/EIA long-term projections, which use oil and natural gas resource estimates from the U.S. Geological Survey, Minerals Management Service and other sources that can be consistently applied to Commission natural gas supply and price modeling[iv]. In the Constrained Supply scenario, the corresponding US DOE/EIA long-term price projection is from their high price case. In the Business As Usual scenario, the corresponding US DOE/EIA long-term price projection is from their reference case.

Because average oil prices for 2004 have been almost $12 per barrel higher than US DOE/EIA price projections for 2004, Commission staff proposes a transition period before prices fall to intersect the long-term price trajectories. In the Constrained Supply scenario, the 2005 price is taken from the most recent US DOE/EIA *Short-Term Energy Outlook*, and shows a large increase from 2004[v]. This one-year projection is based on assumptions of continuing strong oil demand growth, relatively low inventories, and limited prospects for immediate production increases outside the Organization of Petroleum Exporting Countries (OPEC). A three-year straight line decline is assumed to follow, as supply and demand come more into balance, allowing prices to fall to the high price case projections, which then continue from 2008 through 2025. In the Business As Usual scenario, the rate of decline from the estimated 2004 historical oil price is calculated using the average crude oil price decline rate during 2004 of NYMEX futures market expectations looking to 2005 and 2006. From 2007 on, prices are straight-lined to fall and intersect with the long term price track for the US DOE/EIA reference case in 2010.

Constrained Supply Scenario

According to the US DOE/EIA, long-term prices in the range of $34-$36 per barrel presuppose several underlying assumptions or trends. OPEC would have to adhere to production quotas over extended periods of time. This requires strong internal cohesion, perhaps enforced by dominant producer Saudi Arabia. OPEC has been able to demonstrate such discipline for several years, with the memory of the 1998 price crash still fresh, and was even able to coordinate production cuts with non-OPEC producers Mexico, Norway and Russia until prices recovered. With long-term world petroleum demand depressed due to the extended high prices of this scenario, OPEC oil production would have to be limited to 42.2 million barrels per day, up from 30.3 million barrels per day in 2001, but well below the cartel's potential. Non-OPEC production would have to rise by almost 50 percent above 2001 levels. Total world oil demand would be almost 110 million barrels per day, up from 77.8 million barrels per day in 2002, but eight million barrels per day less than in the US DOE/EIA reference case.

Geopolitical considerations that might contribute to this high price case, in particular those of OPEC countries, are alluded to by the US DOE/EIA, but not elaborated upon. This broad category covers a multitude of possibilities as the war on terror, the war in Iraq, and the Israel-Palestine conflict continue on without obvious resolutions. Internal political rivalries and conflicts in important oil producing countries could further impinge on the responsiveness of petroleum markets. The risk of choosing among competing political interests, and the possibility of subsequent reversals, would increase the risk of industry investments. Countries with substantial petroleum resources might resist liberalization of the production side of their markets. Labor and environmental issues might continue to confront producing regions, including more developed countries, without easy resolution. The weakness of the U.S. dollar, in which world oil prices are denominated, compared to other major currencies could further strengthen OPEC's resolve to raise its preferred price band well above $30.

Business As Usual Scenario

The significant assumption of the US DOE/EIA reference case regarding world oil markets is that OPEC manages oil markets toward the upper end of its $22-$28 per barrel price band. In this case, market signals work as they have historically and current strains are a passing phase, the result of temporary lags in production and conservation investments. As a result, oil prices return closer to inflation-adjusted averages for the post-1985 period. At these price levels, substantial resources remain feasible to develop or expand. With higher demand growth in this case, the call on OPEC oil would be greater than in the previous scenario. US DOE/EIA expects OPEC to produce 56 million barrels per day of oil in 2025 in this case. Non-OPEC production would increase by about 38 percent. Total world oil demand would reach about 118 million barrels per day by 2025.

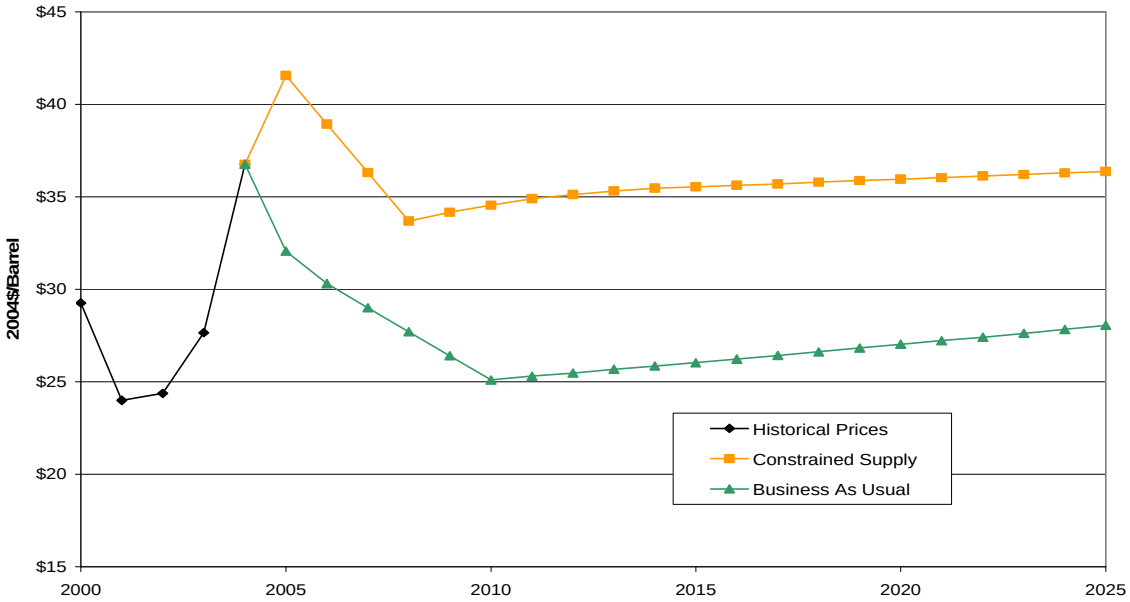
Despite OPEC's management of oil supply, important consumer countries would openly accept the resulting moderate price levels, because they represent a reasonable compromise between producer and consumer interests. In this world, geopolitics does not fade away, but its economic component becomes more salient. The dependency of oil exporting economies on petroleum sales increases their interdependence with oil consuming countries. As OPEC and other countries gradually liberalize their markets to private-sector involvement in production projects, national oil companies would also expand into the downstream markets in consumer countries. The oil industry in Iraq is expected to eventually stabilize, because too much money is at stake. The same is true with important producers, such as Nigeria, Venezuela, Ecuador, Russia and Brazil, where labor or political unrest evolves into relatively benign, if sometimes disorderly, outcomes.

Crude Oil Price Projections

Figure 3 illustrates world average oil price projections consistent with the two scenarios outlined above. Long-term prices in the Constrained Supply scenario equal those of the US DOE/EIA *2004 Annual Energy Outlook* high price case, following the near-term transition period price adjustments discussed previously. Long-term prices for the Business As Usual scenario equal those of the US DOE/EIA reference price case, following a similar, but longer, transition. These single-point price projections are not intended to imply that price variation is insignificant. In fact, as Figure 1 has shown, oil prices have always varied around long-term average prices in the past and will continue to do so in the future. For example, the standard deviation around the average of annual U.S. refiner acquisition costs of imported crude oil from 1995-2004 is $6.36 per barrel.

Figure 3.

World Oil Price Scenarios



Transportation Fuel Price Projections

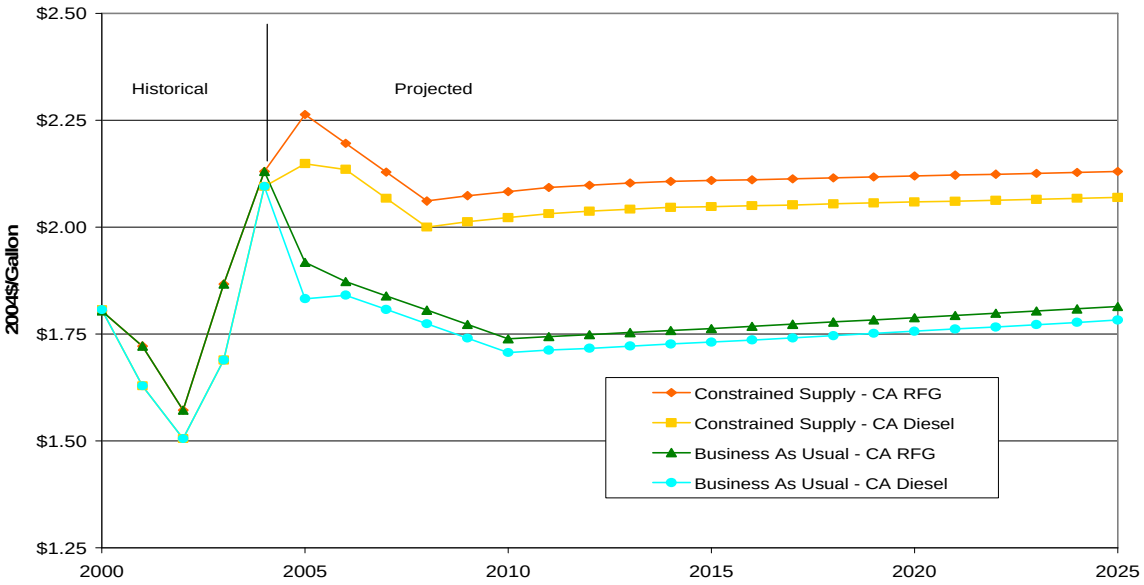
Projected California wholesale fuel prices were developed using crude-to-rack refiner margins calculated by subtracting historical crude oil prices from rack prices for regular-grade reformulated gasoline and diesel[vi]. Averages of these margins were added to projected crude oil prices to get future rack fuel prices. For the Constrained Supply scenario the estimates used were 59.4 cents per gallon for gasoline and 43.8 cents for diesel. Data from 2003-04 was used because this encompassed the only period where the gasoline formulation was primarily limited to MTBE-free Phase 3 reformulated gasoline. Because these estimates were much higher than earlier historical data, in the Business As Usual scenario lower estimates were used, calculated from data for 2002-04. These estimates were 53 cents per gallon for gasoline and 37.1 cents for diesel. A further five cents per gallon were added to diesel prices starting in 2006 to reflect the sulfur rules going into effect then[vii].

Projected state retail prices were calculated by adding state and federal excise taxes, state sales tax and rack-to-retail margins. An important assumption was that excise taxes would remain constant in real terms, meaning they would have to increase nominally at the rate of inflation. A rack-to-retail margin derived from historical data from 2003-04 (18.7 cents per gallon for gasoline, 16 cents for diesel) was used for the Constrained Supply scenario[viii]. Again, because the gasoline margin was somewhat high compared to longer historical averages, a rack-to-retail margin for 2002-04 (15.7

cents per gallon for gasoline, 16 cents for diesel) was used in the Business As Usual scenario. Figure 4 illustrates the California fuel prices consistent with these assumptions and the oil price projections discussed above.

Figure 4.

California Fuel Price Scenarios



Average projected U.S. retail gasoline prices were generated by calculating historical differences between U.S. and California retail fuel prices during 2003-04, or 27.2 cents per gallon. U.S. prices are averages for all formulations of regular-grade gasoline. U.S. retail diesel prices were derived by calculating historical differences between U.S. retail gasoline and diesel prices over that same period, or 6.5 cents per gallon. Starting in 2006, five cents of this were assumed to be taken up by the sulfur requirements, leaving 1.5 cents per gallon difference.

The annual oil and fuel price projections from 2005-2025 for these two scenarios are reported in Tables 1 and 2. Crude oil prices are reported in dollars per barrel and fuel prices in dollars per gallon. Prices for 2000-2003 are historical, while 2004 prices are calculated from historical data through early-November combined with estimates through the end of the year. All prices are in 2004 dollars.

Table 1.

Constrained Supply Scenario

2004$ Year	US RAC Crude	CA RFG Rack	CA RFG Retail	CA Diesel Rack	CA Diesel Retail	US Retail Gasoline	US Retail Diesel
2000	29.94	1.19	1.80	1.11	1.81	1.60	1.61
2001	23.10	1.06	1.72	0.89	1.63	1.50	1.48
2002	24.59	0.98	1.57	0.82	1.51	1.40	1.37
2003	28.29	1.19	1.87	0.99	1.69	1.59	1.54
2004	36.75	1.48	2.13	1.40	2.10	1.86	1.80
2005	41.55	1.57	2.26	1.42	2.15	1.99	1.93
2006	38.93	1.51	2.20	1.41	2.14	1.92	1.91
2007	36.30	1.45	2.13	1.34	2.07	1.86	1.84
2008	33.68	1.39	2.06	1.28	2.00	1.79	1.77
2009	34.16	1.40	2.07	1.29	2.01	1.80	1.79
2010	34.54	1.41	2.08	1.30	2.02	1.81	1.80
2011	34.90	1.42	2.09	1.31	2.03	1.82	1.81
2012	35.12	1.42	2.10	1.32	2.04	1.83	1.81
2013	35.31	1.43	2.10	1.32	2.04	1.83	1.82
2014	35.47	1.43	2.11	1.32	2.05	1.84	1.82
2015	35.54	1.43	2.11	1.33	2.05	1.84	1.82
2016	35.62	1.43	2.11	1.33	2.05	1.84	1.82
2017	35.70	1.44	2.11	1.33	2.05	1.84	1.83
2018	35.79	1.44	2.12	1.33	2.05	1.84	1.83
2019	35.87	1.44	2.12	1.33	2.06	1.85	1.83
2020	35.96	1.44	2.12	1.34	2.06	1.85	1.83
2021	36.03	1.44	2.12	1.34	2.06	1.85	1.83
2022	36.12	1.45	2.12	1.34	2.06	1.85	1.84
2023	36.20	1.45	2.13	1.34	2.06	1.85	1.84
2024	36.29	1.45	2.13	1.34	2.07	1.86	1.84
2025	36.37	1.45	2.13	1.35	2.07	1.86	1.84

Table 2.

Business As Usual Scenario

2004$ Year	US RAC Crude	CA RFG Rack	CA RFG Retail	CA Diesel Rack	CA Diesel Retail	US Retail Gasoline	US Retail Diesel
2000	29.94	1.19	1.80	1.11	1.81	1.60	1.61
2001	23.10	1.06	1.72	0.89	1.63	1.50	1.48
2002	24.59	0.98	1.57	0.82	1.51	1.40	1.37
2003	28.29	1.19	1.87	0.99	1.69	1.59	1.54
2004	36.75	1.48	2.13	1.40	2.10	1.86	1.80
2005	32.06	1.28	1.92	1.13	1.83	1.65	1.58
2006	30.30	1.24	1.87	1.13	1.84	1.60	1.59
2007	29.00	1.21	1.84	1.10	1.81	1.57	1.55
2008	27.70	1.18	1.81	1.07	1.77	1.53	1.52
2009	26.40	1.15	1.77	1.04	1.74	1.50	1.49
2010	25.09	1.12	1.74	1.01	1.71	1.47	1.45
2011	25.30	1.12	1.74	1.01	1.71	1.47	1.46
2012	25.47	1.13	1.75	1.02	1.72	1.48	1.46
2013	25.67	1.13	1.75	1.02	1.72	1.48	1.47
2014	25.85	1.14	1.76	1.03	1.73	1.49	1.47
2015	26.03	1.14	1.76	1.03	1.73	1.49	1.48
2016	26.23	1.15	1.77	1.04	1.74	1.50	1.48
2017	26.42	1.15	1.77	1.04	1.74	1.50	1.49
2018	26.62	1.16	1.78	1.05	1.75	1.51	1.49
2019	26.83	1.16	1.78	1.05	1.75	1.51	1.50
2020	27.02	1.16	1.79	1.06	1.76	1.52	1.50
2021	27.22	1.17	1.79	1.06	1.76	1.52	1.51
2022	27.41	1.17	1.80	1.07	1.77	1.53	1.51
2023	27.62	1.18	1.80	1.07	1.77	1.53	1.52
2024	27.82	1.18	1.81	1.07	1.78	1.54	1.52
2025	28.04	1.19	1.81	1.08	1.78	1.54	1.53

LONG-TERM FUEL DEMAND FORECASTS

Purpose

This task will develop forecasts of California demand for transportation fuels and identify and evaluate the factors affecting future trends in demand. The forecasts are of critical importance in assessing the adequacy/needs of the state's fuel infrastructure over the next 20 years. As an example, forecasts for gasoline and diesel demand, when compared with expected growth of in-state refinery production, will provide a measurement of the need for imports of these fuels, and therefore the need for related marine infrastructure. In addition, the forecasts can support analysis of various transportation fuel demand measures, such as increasing transportation energy efficiency and using non-petroleum fuels and advanced transportation technologies.

Proposed Approach

The transportation energy demand forecasts will rely on four in-house models: CALCARS (for light-duty vehicles), the Transit Model, the Freight Model, and the Commercial Aviation Model. With the exception of vehicle technology attribute data, Commission staff, working with other agencies, will provide all of the input data required for the forecasts, including current vehicle counts, fuel price forecast scenarios and base case projections of demographic /economic growth, consistent with the values used for other sectors in the 2005 Energy Report. K.G. Duleep of Energy & Environmental Associates will use these data in providing historical and projected values for light-duty vehicle attributes, e.g. price and fuel economy, by model year and vehicle class.

Based on these input data, staff proposes to develop fuel demand forecasts for gasoline, diesel and hybrid vehicles for the 6 cases identified in the table below, based on the levels of fuel efficiencies for light-duty vehicles and long-term fuel prices. For fuel prices, the cases assume staff's low fuel price forecast, staff's high fuel price forecast, or an extra high fuel price forecast (+$45 for average cost for barrel of oil). The fuel demand forecast cases will provide a range of fuel demand with Case 1 forecasting the highest fuel demand and Case 6 forecasting the lowest fuel demand.

Fuel Demand Forecast Cases

	Low Fuel Price Forecast	High Fuel Price Forecast	Extra High Fuel Price Forecast
Base Case	Case 1	Case 2	Case 3
Higher Fuel Efficiency	Case 4	Case 5	Case 6

The Low Fuel Price and High Fuel Price Forecast cases are the staff proposed cases—business as usual and constrained supply--to provide a means to test the robustness of potential energy policies under a range of plausible petroleum price futures. The Higher Fuel Efficiency and Extra High Fuel Price Forecast cases will be further discussed in the 2005 Energy Report Committee Workshop, scheduled for December 20, on improving vehicle efficiency and deployment of non-petroleum transportation fuels.

Project Schedule

Milestones	**Dates**
Obtain fuel price projections	11/15/04
Obtain demographic/economic projections	11/30/04
Obtain vehicle technology projections from consultant	12/15/04-1/31/05
Provide fuel demand forecasts	12/31/04-2/15/05
Complete draft report on forecasts	3/15/05

SUPPLY INFRASTRUCTURE ADEQUACY

Purpose

In-state oil field production continues to fall and demand continues to increase. At the same time, the state has become a net importer of gasoline and California petroleum refineries are operating at near capacity. These trends have created concerns over the adequacy of transportation fuels supply in both the short term, due to continued gasoline price spikes, and the long term.

This task will analyze engineering and economic issues related to the adequacy of California's petroleum and petroleum fuels infrastructure, the potential impacts on petroleum supply and petroleum product prices that infrastructure problems could impose, and potential steps that the state can take to encourage adequate petroleum infrastructure to accommodate unconstrained movement of petroleum products over the next 20 years.

Proposed Approach

Staff proposes to perform the work under 7 subtasks:

Subtask

1. Describe the State's Petroleum Infrastructure
2. Identify Physical Bottlenecks and Constraints
3. Analyze Surge Capacity (capability to respond to disruptions)
4. Analyze Market Access of all Parties
5. Determine Impact of Government Activities and Regulation
6. Conduct Interviews, Follow-up Surveys and Hold Infrastructure Workshop
7. Present Conclusions and Recommendations

Subtasks 2 and 5 will rely on the interviews, surveys and infrastructure workshop of Subtask 6, along with currently available information. The interviews with industry are being conducted to collect pertinent information regarding marine facilities, refineries, tank farms, pipelines, and possibly other aspects of California's petroleum infrastructure. In addition, staff will also conduct interviews with the State Lands Commission, the Army Corp of Engineers, the Coast Guard, and others. Staff is also asking the parties to respond to survey questions to help gain information for all important sites. The recent Market Power Workshop supports the analysis of market access in Subtask 4. The Commission recently initiated a contract with Altos Management Partners to develop the California Petroleum Infrastructure and Market Simulation (PINSIM) model. Staff anticipates this model will provide valuable insights for Subtasks 2, 3, and 4.

Project Schedule

Date	Milestone
December 19, 2004	Complete Northern California Interviews
December 19, 2004	Complete Southern California Interviews
January 31, 2005	Complete Follow-up Surveys
March 15, 2005	Receive Model Scenarios in support of 2005 Energy Report
March 18, 2005	Complete Draft Report
Early May, 2005	Hold Infrastructure Workshop
May 15, 2005	Provide Revised Material for 2005 Energy Report

[i] International Energy Agency, *Oil Market Report*; October 12, 2004.
[ii] Energy Commission staff has addressed many of these issues in a series of monthly reports available at <http://www.energy.ca.gov/2003_price_spikes/index.html>.
[iii] See the *Transportation Fuels, Technologies, and Infrastructure Assessment Report*, available at http://www.energy.ca.gov/reports/100-03-013F.PDF.
[iv] Information on the various US DOE/EIA *2004 Annual Energy Outlook* and *2004 International Energy Outlook* assumptions and results can be accessed from the following web page: http://www.eia.doe.gov/oiaf/forecasting.html.
[v] The US DOE/EIA *Short-Term Energy Outlook – November 2004* can be found at: http://www.eia.doe.gov/emeu/steo/pub/contents.html.
[vi] Weekly average world oil spot prices are from the US DOE/EIA, and California wholesale rack prices of regular-grade reformulated gasoline and diesel are from the Oil Price Information Service (OPIS). These margins include all non-crude oil costs associated with refining and terminal operation, crude oil processing, oxygenate additives, product shipment and storage, oil spill fees, depreciation, purchases of gasoline to cover refinery shortages, brand advertising, and profits. The world average world oil spot price was used in this analysis because the U.S. refiner acquisition cost of crude oil index is not available on a weekly basis. The difference between these two oil price indexes is small, about 36 cents per barrel on average from 1997 to the present, so this correction factor was applied to adjust the forecasts.
[vii] California Air Resources Board, *Appendix IV, Fuels Report: Appendix to the Diesel Risk Reduction Plan*; October 2000. Available at the following web page: http://www.arb.ca.gov/diesel/documents/rrpapp4.pdf
[viii] Rack-to-retail margins are derived by staff from US DOE/EIA retail price (excluding taxes) and OPIS rack price data, and include: franchise fees, rents, wages, utilities, supplies, equipment maintenance, environmental fees, licenses, permitting fees, credit card fees, insurance, depreciation, advertising, transportation and profits.