Submission of

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Request for Public Comment

Market Manipulation Rulemaking
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I. Introduction

My name is Jane Kidd. I am pleased to respond to the request for public comment by the Federal Trade Commission ("the Commission") concerning the effects of the ban on the export of Alaska North Slope ("ANS") crude oil and its repeal, presented as a case study in the Commission's Advance Notice of Proposed Rulemaking ("ANPR"). I am a Senior Economist with Econ One Research, Inc. ("Econ One"), an economic research and consulting firm. Much of the work over the course of my professional career has involved issues related to the valuation of crude oil, natural gas, and petroleum products. I have advised the California Attorney General on pricing issues related to crude oil and refined petroleum products and have served as the motor fuels consultant to New York's Consumer Protection Board. I have testified in federal and state court proceedings. I am past president of the International Association for Energy Economics ("IAEE") Houston Chapter.

II. Summary of Comments

1. Contrary to the conclusions drawn by earlier studies, Econ One has found that the repeal of the ban on ANS exports played little, if any, role in the increase in the price of ANS crude oil relative to world price levels during the 1990s. Rather, the increase in crude oil prices seen on the West Coast was due to a shift from surplus to deficit indigenous crude oil production. This shift, and the resulting increase in the relative West Coast prices, occurred well before the ANS export ban was repealed in mid-1996.

2. Exports of ANS crude effectively have ceased since the ban was repealed as a result of the West Coast's increasing reliance on imported foreign crude to meet demand. Therefore, a re-imposition by the President of the ANS crude oil export ban alone likely would have no effect on West Coast supply fundamentals or crude oil prices.

III. Effects of Repeal of the ANS Oil Export Ban

A. Background

Federal legislation authorizing construction of the Trans-Alaskan Pipeline System ("TAPS") banned the export of ANS crude oil to foreign countries. With the completion of TAPS in 1977, the onset of ANS production created a situation where indigenous crude oil production exceeded the refining capacity of the West Coast. As a result, ANS production not consumed on the West Coast was shipped to other U.S. refining regions. The surplus of crude oil relative to West Coast refining requirements, coupled

with the relatively high transportation costs to other U.S. refining regions, depressed the price of ANS, as well as California crude oils, below world levels.

The supply pressure resulting from ANS crude production pushed West Coast prices to a point where imports for the Middle East were no longer economical for West Coast refiners. ANS production effectively replaced Middle East production as the marginal source of crude oil supply to the West Coast, an important factor as the marginal cost of supply to a particular location should determine the market price of crude oil at that location.

This situation began to change after ANS production peaked in the late 1980s. Figure 1 shows PADD V crude oil production and refinery consumption beginning in 1988.[1] By 1993, crude oil production and consumption were about equal. As ANS production continued to decline during the 1990s, imports of foreign crude oil grew dramatically in order to meet demand. Figure 2 shows imports of foreign crude oil into and "exports" of ANS out of PADD V beginning in 1992.[2] This figure shows that PADD V had become a net importer of crude oil relative to ANS exports by 1993 and a net importer of sour crude oils (similar to ANS) by 1996. By the time the ban on ANS exports was repealed in mid-1996, ANS had been replaced by foreign crude oil as the marginal source of supply to the West Coast.

B. Prior Studies

Retrospective studies by the GAO (1999) and Bausell (2001) examined the impact of the export ban and found that the lifting of the export ban served to raise ANS prices by a significant amount – between $0.98 and $1.30 per barrel.[3] However, neither of these studies accounted for the changes in West Coast supply fundaments over the same time period.

As the PADD V developed a production deficit during the 1990s as shown in Figure 1, we would expect to see an increase in the price of PADD V crude oils (such as ANS) rise relative to world levels in order to attract imported supplies. Once West Coast crude oil prices met world levels, however, we would not expect to see additional relative ANS price increases result from the lifting of the export ban. The GAO and Bausell studies did not disentangle these factors from the impact of lifting the ANS export ban.

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[1] PADD refers to Petroleum Area for Defense District. PADD V consists of Alaska, Hawaii, Washington, Oregon, California, Nevada, and Arizona. PADD V is used synonymously with West Coast in this analysis. Crude oil produced in PADD V comes from Alaska and California.

[2] As used here, "exports" refer to shipments of ANS out of PADD V.

[3] See U.S. General Accounting Office (1999), "Alaskan North Slope Oil: Limited Effects of Lifting Export Ban on Oil and Shipping Industries and Consumers." GAO/RCED-99-191 and Bausell, Jr. Charles W, Frank W. Rusco and W. David Walls (2001), "Lifting the Alaskan Oil Export Ban: An Intervention Analysis." *The Energy Journal* 22: 81-93.

C. Econ One's Empirical Analysis

Econ One has quantified the effects of the shift of the West Coast from surplus producer to net importer and the lifting of the ban on ANS exports.[4] Econ One compared changes in the prices of ANS and Line 63 (a California crude oil) relative to changes in the prices of West Texas Intermediate ("WTI") and West Texas Sour ("WTS"), two crude oil streams consumed in large quantities on the U.S. Gulf Coast and elsewhere. The market prices of WTI and WTS are reflective of world crude oil price levels since they compete directly with imports on the Gulf Coast and are benchmarks found in the pricing formulae used by many foreign crude oil producers. Econ One examined the change in price differentials between the West Coast (i.e., ANS and Line 63) crude oils and these world benchmark crude oils before and after the shift in supply fundamentals the occurred on the West Coast in the mid-1990s and before and after the repeal of the export ban.

A visual inspection of the price data shown in Figure 3 suggests the price of West Coast produced crude oils rose in the early 1990s relative to the benchmark price levels. This increase appears to have been well under way before the ban was lifted in mid-1996. Moreover, there is little, if any, sustained increase apparent in the prices of West Coast crude oils after lifting of the ban through 2001, when ANS exports effectively ended.

A time series econometric model of the prices over the 10-year period beginning 1992 bears this out. After incorporating dummy variables for dates after the end of 1994 to mark the shift from surplus to deficit production and after May 1996 to mark the end of the ANS ban, Econ One's model found the magnitude of the impact on price from shift to deficit production to be very close to that which prior studies attributed to the impact of the ANS export ban. Table 1 reports the empirical results. The magnitude of the maximum impact associated with removal of the export ban in Econ One's model is mixed and significant for only the WTS benchmark. The mean of all estimated impacts associated with lifting the ban was $0.12 per barrel. The price differences relative to WTI actually fell as the result of lifting the ban. Excluding those negative estimates increases the maximum possible effect from lifting the ban to $0.34 per barrel – an amount far lower than prior studies had estimated.

[4] My comments in part draw from earlier work by Econ One economists. See Mark Dwyer and Barry Pulliam (2002), "Lifting the ANS Oil Export Ban: A Reconsideration of the Evidence," Working Paper Presented the 22nd USAEE/IAEE North American Conference, Vancouver, British Columbia, Canada.

D. Conclusions

After accounting for the shift in West Coast supply fundamentals, empirical evidence reveals that the ban on ANS exports had little or no effect on West Coast Crude oil prices. Because of the shift in supply fundamentals and given that ANS exports effectively ceased subsequent to lifting the ban, any re-imposition of a ban on ANS exports should have no impact on West Coast crude oil prices.

FIGURE 1

PADD V Crude Oil Production and Consumption 1988 - 2001

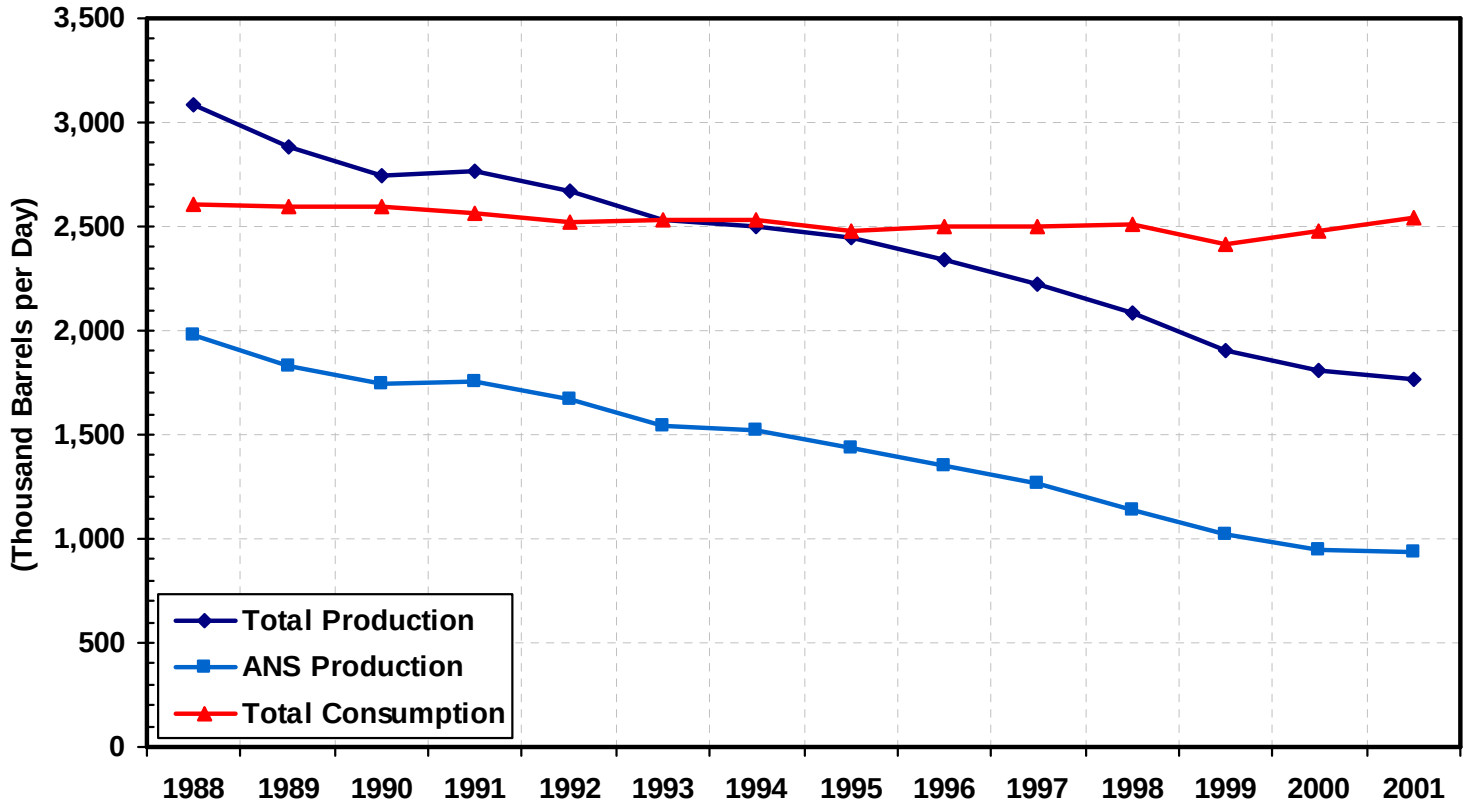

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FIGURE 2

PADD V Crude Oil Imports and Exports
1992 - 2001

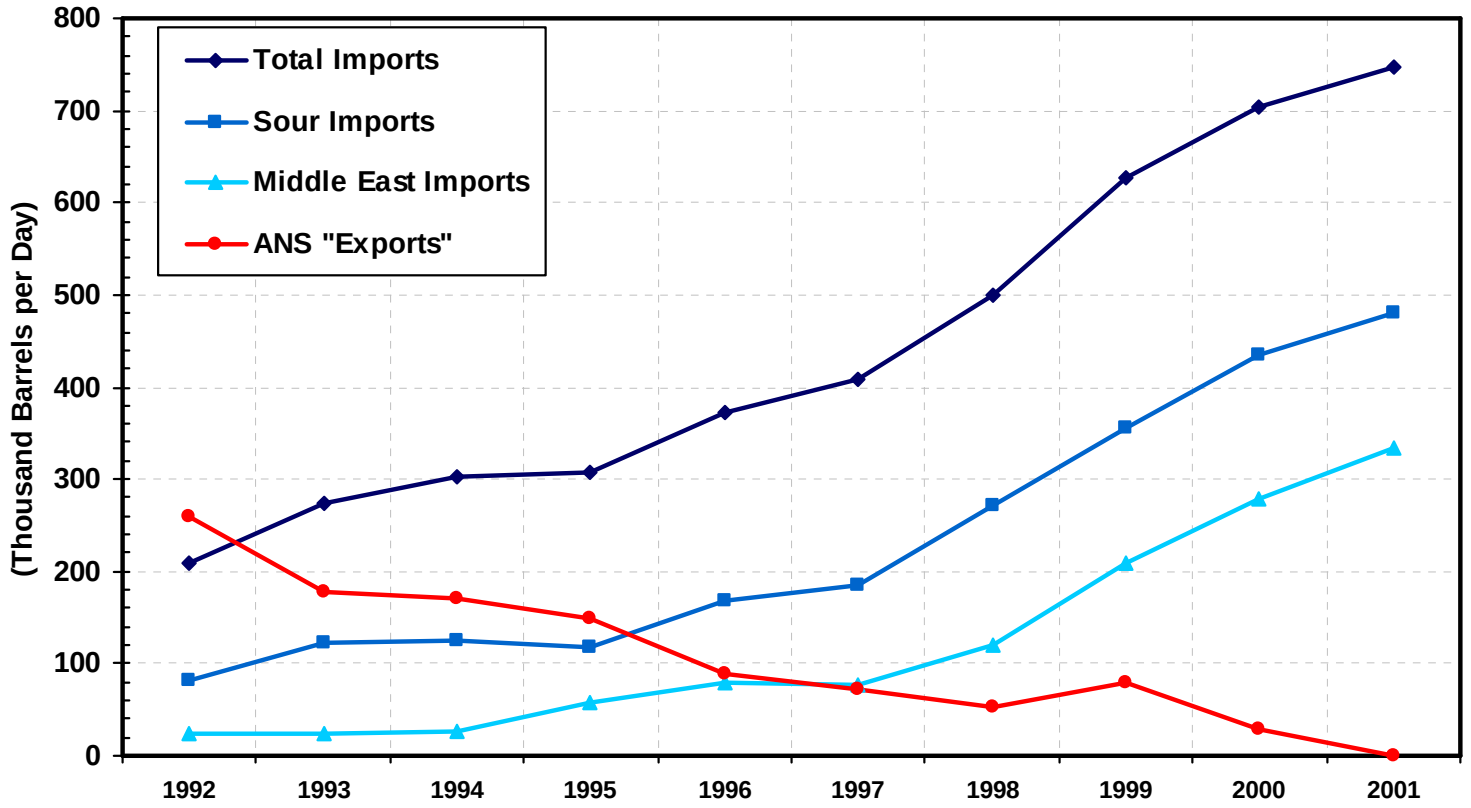
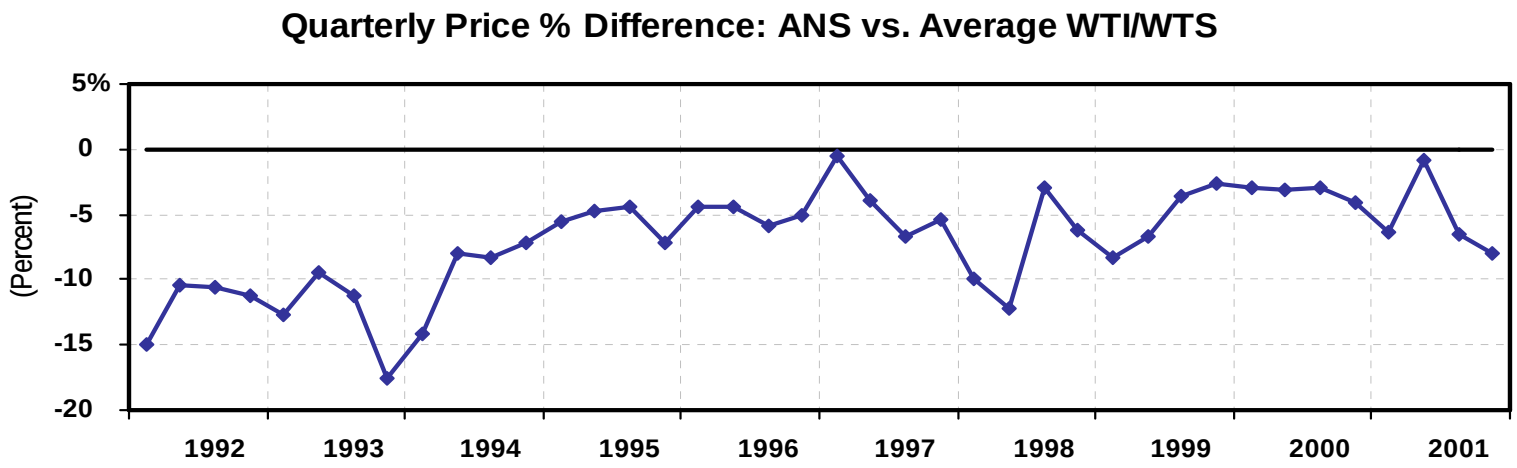
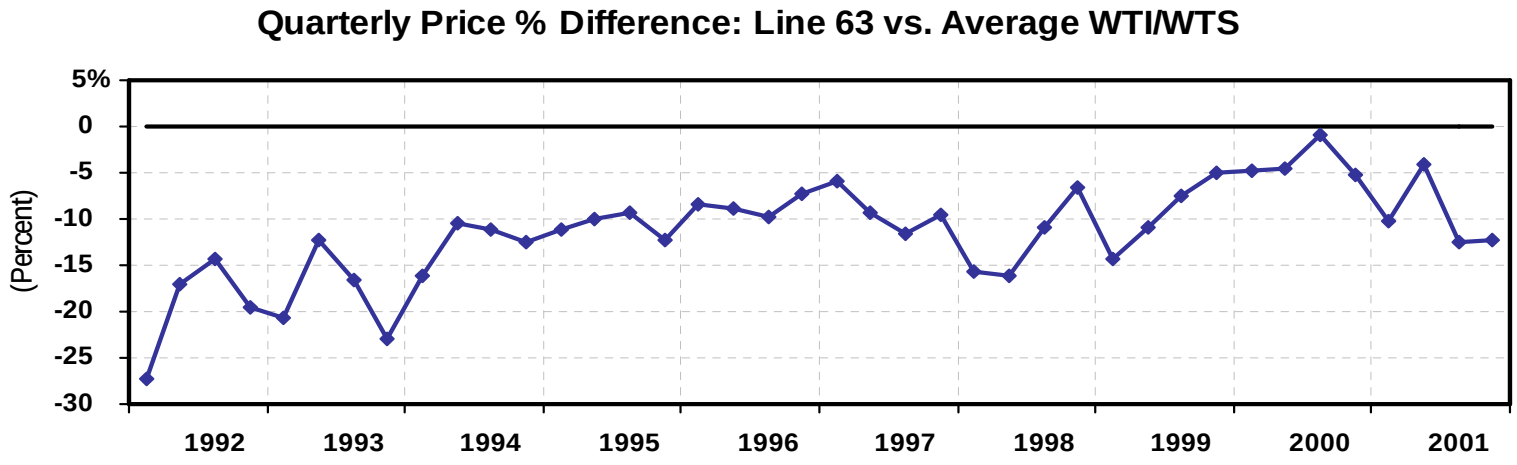


FIGURE 3

West Coast vs. World Crude Oil Prices
1992 - 2001





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Estimated Impact of Change from Surplus to Production Deficit and Lifting of Export Ban 1992 – 2001

TABLE 1

Price Differential	Impact of Change in Production	Impact of Lifting Export Ban
	(Dollars per Barrel)	
ANS-WTI	1.22	-0.41 *
ANS-WTS	0.85	0.50
ANS-WTI/WTS	1.06	0.05 *
L63-WTI	1.19	-0.25 *
L63-WTS	0.94	0.63
L63-WTI/WTS	1.11	0.19 *

* Insignificant at 90% confidence level.

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