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REFINERY INCENTIVES, REFINED PRODUCT IMPORTS AND THE ENTITLEMENT PROGRAM

Statement before the

Subcommittee on Energy Conservation and Regulation of the Committee on Energy and Natural Resources

U.S. Senate

by

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Washington, D.C.
July 10, 1978

Thank you for inviting me to testify before your committee. In my presentation today I would like to concentrate on two of the subjects listed in your questionnaire: additional entitlements for residual fuel oil imports into PAD I and the competitiveness of existing and potential domestic refining capacity vis-a-vis foreign plants.

I would like to address myself first to the refinery question. For the last several years U.S. refineries have been in the relatively advantageous position of being highly protected from foreign competition. The principal protective device has been the combination of price controls on domestic crude oil and the sharing among U.S. refiners of this lower priced crude oil through the entitlements program. Currently about 41% of total U.S. crude oil runs are under price control. This gives U.S. refiners an advantage of at least $2.00/bbl over their foreign competitors. In addition, nearly all products imports carry a 63¢/bbl import fee.* As a result of these measures products imports declined by 660,000 b/d between 1973 and 1977 despite a 1.1 million b/d increase in domestic oil demand and growing excess capacity in Caribbean and other foreign export refineries. As long as both these features remain in effect, existing U.S. refineries have relatively little competition from abroad in their traditional markets.

However, the more important of these features, domestic price controls, is slated to be phased out by no later than October, 1981

*The fee is currently not collected on residual fuel oil imported into PAD I.

under existing legislation. Under the Administration's proposed alternative, the COET, price controls would remain in effect for producers but refiners would have to pay world market prices for all domestic crude within two to three years. Thus, in either case the existing crude oil cost advantage of domestic refiners over foreign competitors would be eliminated. East Coast refiners would still be able to compete with Caribbean refiners at the East Coast and Gulf Coast refiners would remain competitive at the Gulf Coast, if we assume no difference in U.S. and Caribbean refining costs. However, since Caribbean refineries are under considerably fewer environmental constraints than U.S. plants and also have significant tax advantages over their U.S. competitors, the competitive margin could well turn against them. Nothing needs to be done about this eventuality while domestic crude oil costs to U.S. refiners remain well below world levels. However, consideration should be given to how to protect these refiners when this is no longer the case. One modest additional protection would be to remove the 21¢/bbl import fee on crude oil and thus give U.S. refiners the full protection of the 63¢/bbl import fee. The crude oil import fee serves little purpose, since domestic crude oil producers do not need an incentive on top of the delivered world market price. Removal of the crude oil import fee, following the end of domestic crude price controls, would be of particular importance to the East Coast refiners, since virtually all their crude supplies are of foreign origin.

In addition to domestic refinery output consumed within the region in which it is produced, there are substantial inter-regional products shipments from existing refineries. The most important of these shipments are those from the Gulf Coast to the East Coast. They would face the brunt of the competition from abroad, under conditions of equal U.S. and foreign crude oil prices, because of the additional transportation cost. This would apply especially to the 1.2 million b/d shipped by tanker and barge. Under the Jones Act which limits all coastal traffic to U.S. flag vessels, Gulf Coast refiners have a freight disadvantage of 55-75¢/bbl vis-a-vis Caribbean refiners at the U.S. East Coast. Removal of the crude oil import fee would clearly not be enough to protect these shipments. On the other hand, the volume exposed to foreign competition would be limited. Residual fuel oil shipments from the Gulf to the East Coast will be largely eliminated within 2 or 3 years because of the rapidly growing Gulf Coast requirements for this product. Gasoline shipments would be somewhat affected but Caribbean gasoline supplies in excess of local demand are relatively small and mostly not of U.S. quality. Some additional supplies could, however, come in from Rotterdam and the Mediteranean. Middle distillate tanker movements would be considerably more vulnerable to foreign competition than gasoline.

In the absence of special protection, a signficant share of Gulf Coast tanker shipments to the East Coast could eventually be lost to lower cost foreign suppliers. The impact of such a development on the U.S. balance of payments would, of course, be negative. For example, every 100,000 b/d of clean products imported in place of domestic output would add roughly $100 million annually to our oil import bill.

Another problematic aspect of full crude oil equalization is its potential disincentive for new domestic refinery capacity. With new capacity cost nearly twice that of plants built only a few years ago and with substantial excess capacity in both the Caribbean and Western Europe, the phasing out of the entitlements program will create a major deterrent to the construction of additional full-scale refining capacity in the U.S., unless some substitute protective measure is devised by the government.

The first question which must be addressed is whether the U.S. really needs new refinery capacity. Our studies indicate that U.S. oil demand will rise by 2.2-2.4 million b/d between 1977 and 1985, which represents an annual growth rate of 1.5%. Since U.S. refineries still have some spare capacity, to meet all of this increase from domestic plants might require a little under two million b/d in capacity additions. If we build less than this capacity, products imports will have to grow. Given the substantial spare capacity in existing Caribbean and other foreign export refineries, some additional products are readily obtainable from abroad at lower costs than from newly built domestic plants. However, if we do not expand our refining capacity by at least

1.0-1.2 million b/d over the next seven years, we will encourage the construction of new foreign capacity to meet our incremental needs. This does not seem to be in the national interest from an employment, investment or balance of payments point of view.

The required domestic capacity addition to prevent such a development would be relatively small. Yet, much of it is unlikely to take place without some form of long term government incentive or protection, in excess of the existing 58¢/bbl protection given new capacity for the first five years of operation. Failure to develop such a policy soon would be tantamount to deciding in favor of the import option, considering the lead time required to build new facilities.

How this protection should be structured in the post-entitlement period is difficult to conceive at this time. If there is a COET, some of the funds could be used in support of new refineries. However, COET requires continuation of domestic crude price controls, something which would seem unjustifiable and untenable in the longer run. If we assume COET is phased out along with price controls over the next 4-5 years, it does not offer a satisfactory source of incentives for refinery projects in the 1980's. Imposition of a products import fee high enough to encourage domestic refinery expansion would probably not be acceptable to consumers in the areas exposed to imports. In addition, it would tend to overprotect existing domestic refineries, particularly in the case of high capacity utilization.

Perhaps, special tax treatment in the form of rapid write-offs or tax credits for new plants might offer a solution. Since the projects which would qualify for such special tax treatment would presumably not be built without them, the tax incentives would not represent an actual drain on federal funds.

Next, I would like to discuss briefly the existing and proposed system of entitlements for residual fuel imports into PAD I. My remarks draw upon my recent testimony at the hearings before the Subcommittee on Energy and Power of the U.S. House of Representatives.

The entitlements policy for residual fuel oil dates back to the beginning of 1976. At that time it had become amply apparent that the crude oil entitlements were causing some structural changes in the East Coast residual fuel oil market. Thus, while in 1973 about 79% of East Coast residual supplies came from foreign sources, by the second half of 1975 the share had dropped to 57%. The principal reason, by far, for this change was, of course, the differential in crude oil costs between U.S. and foreign refiners. It enabled the domestic companies to undersell the importers in the East Coast market which had traditionally been supplied almost entirely from foreign--mainly Caribbean--sources. The principal beneficiary of the system, according to official FEA analysis, was the refinery in the U.S. Virgin Islands, since it was the only major U.S. plant at the time designed to maximize the yield of residual fuel oil per barrel of crude throughput. Its share of the East Coast market rose from 11% to nearly 17% between 1973 and the second half of 1975.

In order to halt this shift in market share and its negative impact on traditional U.S. residual importers and their Caribbean suppliers, the FEA issued a 30% crude oil entitlement for each barrel of residual fuel oil imported into PAD I and reduced U.S. (including Virgin Islands) refiner crude entitlements by half a barrel for each barrel of residual oil sold in PAD I above the first 5,000 b/d. This reduced, but did not eliminate, the advantage of the Virgin Islands over foreign Caribbean refiners. At the same time it created a disincentive for Gulf Coast refiners to ship their residual fuel oil surplus to PAD I.

The DOE has proposed several changes in the existing system, such as granting full crude oil entitlements for residual fuel oil imported into PAD I and removing all entitlement restrictions for domestic refiners selling in or to PAD I. The proposed action would in essence put the Virgin Islands refinery competitively on a par with non-U.S. Caribbean refiners by eliminating its remaining advantage over these plants; it would also improve the competitiveness of Gulf Coast refiner sales in the PAD I market (see attached Table).

As for the consumer, the move to 100% residual entitlements can be expected to reduce the cost of the product from what it would otherwise be. From the point of view of regional equity, this may be justifiable. Residual fuel oil is the only oil product in the U.S. whose price has not been significantly affected by the crude oil entitlements program because of its high ratio of imports. Since 95% of U.S. residual imports go into PAD I, which also accounts for over 50% of total U.S. consumption of this product, the economic impact of the entitlement treatment of this product has been concentrated on the East Coast. Thus, as long as the entitlement program remains in existence, it would seem appropriate that PAD I should share in its full benefit. On the other hand, it would be wrong to extend this treatment to areas supplied adequately from domestic sources, since this would probably result in the displacement of domestic residual fuel oil by imports which would be contrary to the Administration's policy.

REFINERS' COST COMPARISON FOR EAST COAST RESIDUAL FUEL OIL

($/Bbl)

	Gulf Coast	East Coast	Virgin Islands	Caribbean Refiner/ Importer
A) Current Program				
Crude Oil: Arab Light (F.O.B.)	12.70	12.70	12.70	12.70
Total Transportation*: Crude and Product	2.03	.91	1.14	1.14
Entitlement Benefit	(.95)	(.95)	(.95)	(.57)
(On 1st 5,000 B/D)	(1.90)	(1.90)	(1.90)	(.57)
Import Fee/Duty	.21	.21	.05	.05
Total Cost	13.99	12.87	12.94	13.32
(1st 5,000 B/D)	13.04	11.92	11.99	13.32

	Gulf Coast	East Coast	Virgin Islands	Caribbean Refiner/ Importer
B) Proposed Program				
Crude Oil: Arab Light (F.O.B.)	12.70	12.70	12.70	12.70
Total Transportation*: Crude and Product	2.03	.91	1.14	1.14
Entitlement Benefit	(1.82)	(1.82)	(1.82)**	(1.82)**
Import Fee	.21	.21	.63	.63
Total Cost	13.12	12.00	12.65	12.65

*Transportation:	Gulf Coast	East Coast	Virgin Islands	Caribbean Refiner/ Importer
Crude Oil				
VLCC (Spot), Persian Gulf to Caribbean	.46	.46	.46	.46
Terminaling	.18	.18	.18	.18
Tanker, Caribbean to U.S.	.24	.22	-	-
Crude Oil Total	.88	.86	.64	.64
Product Freight to U.S. East Coast	1.15	.05	.50	.50
Total Transportation	2.03	.91	1.14	1.14

**If fee paid.